R9260-6F 2/88

Permanent Disability Benefits In Workers' Compensation

Permanent Disability Benefits in Workers' Compensation

Monroe Berkowitz
and
John F. Burton, Jr.

1987

W. E. Upjohn Institute for Employment Research

Library of Congress Cataloging-in-Publication Data

Berkowitz, Monroe, 1919-
Permanent disability benefits in workers' compensation / Monroe Berkowitz and John F. Burton, Jr.
p. 459 cm.
Includes bibliographies and index.
ISBN 0-88099-051-1. ISBN 0-88099-050-3 (pbk.)
1. Insurance, Disability—United States. 2. Workers' compensation—United States. I. Burton, John F. II. Title.
HD7105.25.U6B47 1987
368.4'1'00973—dc19 87-22874
CIP

Copyright © 1987
by the
W. E. UPJOHN INSTITUTE
FOR EMPLOYMENT RESEARCH

300 South Westnedge Ave.
Kalamazoo, Michigan 49007

THE INSTITUTE, a nonprofit research organization, was established on July 1, 1945. It is an activity of the W. E. Upjohn Unemployment Trustee Corporation, which was formed in 1932 to administer a fund set aside by the late Dr. W. E. Upjohn for the purpose of carrying on "research into the causes and effects of unemployment and measures for the alleviation of unemployment."

The Board of Trustees of the W. E. Upjohn Unemployment Trustee Corporation

Preston S. Parish, Chairman
Charles C. Gibbons, Vice Chairman
James H. Duncan, Secretary-Treasurer
E. Gifford Upjohn, M.D.
Mrs. Genevieve U. Gilmore
John T. Bernhard
Paul H. Todd
David W. Breneman
Ray T. Parfet, Jr.

The Staff of the Institute

Robert G. Spiegelman
Executive Director

Judith K. Gentry
H. Allan Hunt
Timothy L. Hunt
Louis S. Jacobson
Christopher J. O'Leary
Robert A. Straits
Stephen A. Woodbury
Jack R. Woods

Authors

Monroe Berkowitz has recently retired from his teaching duties as professor of economics at Rutgers, the State University of New Jersey. He maintains his connection with the Bureau of Economic Research where he directs the Disability and Health Economics Research section and he will continue arbitrating labor-management disputes. A graduate of Ohio University, Professor Berkowitz received his Ph.D. degree in economics from Columbia University. His interest in workers compensation issues began with his study of the New Jersey system, which was published in 1960. Since then he has published numerous articles on various aspects of the field, with recent concentration in the field of rehabilitation. He is the editor of *Measuring the Efficiency of Public Programs*, to be published in 1988 by Temple University Press.

John F. Burton, Jr. is a professor in the New York State School of Industrial and Labor Relations at Cornell University. He formerly was professor in the Graduate School of Business of the University of Chicago and chairman of the National Commission on State Workmen's Compensation Laws. He has published widely on public sector collective bargaining and workers' compensation, including (with Alan B. Krueger), "Interstate Variations in the Employers' Costs in Workers' Compensation," which was included in *Current Issues in Workers' Compensation*, published by the Upjohn Institute in 1986. Burton received his undergraduate education at Cornell University and received both an LL.B. and Ph.D. in economics from the University of Michigan. His dissertation research, which examined workers' compensation costs, was partially supported by the Upjohn Institute.

Acknowledgements

The origin of this study was a research project conducted by Workers' Disability Income Systems, Inc. with support from the National Science Foundation under the title "An Evaluation of State Level Human Resource Delivery Programs: Disability Compensation Programs" (No. APR75-01067). The final report for that project, *Permanent Disability Benefits in the Workers' Compensation Program*, was completed in 1979.

The authors of the 1979 NSF final report were the authors of the present volume plus Wayne Vroman. Other staff members of Workers' Disability Income Systems, Inc. who were essential to the report were Katherine Hagerty, who conducted much of the field work for the Ten-State Study (part II of the present volume), and Bruce Vermeulen, who supervised much of the data collection for the Wage-Loss Study (part III of the present volume). We wish to express our appreciation again to all who assisted in the preparation of the NSF final report, including Wayne Vroman, Katherine Hagerty, and Bruce Vermeulen, plus the three National Science Foundation program managers who had responsibility for the project: Lynn Dolins, James Cowig, and Frank P. Scioli, Jr.

After submitting the NSF final report, we decided to revise and update the manuscript. This task has taken considerable effort because of the rapid pace of change in the 10 jurisdictions we selected for scrutiny. As an example, Florida completely revised its statutory aproach to permanent disability benefits subsequent to the submission of our final report to the National Science Foundation. The present volume contains a chapter devoted entirely to Florida because of the significance of the recent changes. Although changes elsewhere have not been as dramatic, in almost all states some statutory or judicial developments of note have occurred since 1979, or proposals for substantial revisions of the law are pending. We have attempted to include all significant developments or proposals through 1986 involving the permanent disability benefits of the workers' compensation progrms in the 10 jurisdictions.

Various persons in the 10 jurisdictions, many of whom are acknowledged in the notes to the various chapters, aided in the preparation of the present volume. We thank those who aided our efforts, whether specifically named or not. Two persons were critical to the preparation of the manuscript: Nancy Orchard, who typed most of the manuscript in draft form and then entered the entire study into a word processing program, and Brian Keeling, who, as copy editor, shortened and polished the text. Finally, we express our appreciation to H. Allan Hunt, Manager of Research at the W. E. Upjohn Institute, who demonstrated a most admirable mixture of patience and support as this study progressed.

Monroe Berkowitz
John F. Burton, Jr.
October 1987

Preface

More than five million persons suffer work-related injuries or diseases each year.[1] Most of these incidents require only medical treatment or involve brief interruptions of work, but annually over two million workers experience work-related injuries or diseases that disable them for more than a day. For at least 100,000 of these workers (more likely, for over 250,000) the consequences include permanent disabilities: that is, losses of actual earnings or of earning capacity even after maximum medical recovery. These permanent disabilities are usually partial, rather than total: the workers continue to have some earnings or retain some of their preinjury earning capacity.

Benefits for workers who are permanently and partially disabled are the most expensive portion of workers' compensation, the program for work-related injuries and diseases.[2] Although permanent partial cases account for less than 25 percent of the workers' compensation cases paying cash benefits, the cash benefits in these cases account for more than 60 percent of all such payments (Price 1984, table 4).

Permanent partial benefits not only are the most expensive part of workers' compensation, they are the most controversial and complex aspect of that program. The statutes and practices used to compensate partial disability vary widely among states. To mention but one example, cash benefits for minor permanent partial cases represent less than 10 percent of all payments in ten states, but more than 30 percent in seven others.[3]

The overall expense of permanent partial benefits, the considerable variations in their costs among states, and the many controversies over the procedures and standards used to determine the benefits make them a crucial area for reform. Indeed, the National Commission on State Workmen's Compensation Laws concluded in its 1972 report that reforming permanent partial benefits was one of the two problems "so important that the vitality of the state systems will be tested by the ability of states to resolve them satisfactorily" (National Commission 1972, p. 129). Nonetheless, because the issue was so intractable and the time available to the National Commission so limited, in its 19 essential recommendations the Commission refrained from making precise recommendations for restructuring permanent partial benefits, concentrating instead on expansion of coverage to previously unprotected workers and increases in the amount and duration of benefits for total disability and death (National Commission 1972, p. 67).

Workers' compensation developments in the years 1972-86 bear the imprint of the National Commission's report. Impediments to coverage, such as the exemption of small employers, were eliminated in many jurisdictions, and the proportion of employees covered by workers' compensation increased from 84 percent in 1972 to 88 percent in 1980 (Price 1984, table 1). Perhaps even more impressive is the improvement in benefits. In 1972, for example, only six of 51 jurisdictions had temporary total maximum weekly benefits that were at least 66 2/3 percent of the state's average weekly wage.[4] This meant that the majority of workers did not receive the nominal replacement rate for total disability found in most statutes—namely 66 2/3 percent of preinjury wages—but received less because the maximum held down their benefits. By 1986, benefits generally were much more adequate. Thirty-one jurisdictions (out of 51) in 1986 had maximums for temporary total disability that were at least 100 percent of the state's average weekly wage, and only 9 had maximums less than 66 2/3 percent of the state's wage. Durations of benefits also improved. For example, whereas in 1972 only 17 jurisdictions paid benefits for life or the entire period of disability in permanent total cases, in 1986, 35 jurisdictions paid for the extended duration.

These improvements in coverage and benefits were accompanied by a surge in the costs of workers' compensation. Benefits paid in 1972 totalled $4.1 billion; by 1984 (the latest year for which data are available) the total was $19.5 billion (Price 1984, table 3, and Price 1987, table 1). The costs to employers, including insurance premiums and administrative expenses, were $5.8 billion or 1.14 percent of payroll in 1972; by 1984 they were $25.3 billion or 1.66 percent of payroll (Price 1984, table 7, and Price 1987).

These escalating costs caused apprehension among employees, carriers, and state legislators. One particular area of concern is permanent partial disability benefits, the cost of which appears to have grown proportionately faster than the costs of benefits for death and total disability since 1972 despite the National Commission's emphasis on the latter types of benefits. Permanent partial benefits accounted for 65.20 percent of all cash benefits in 1968, declined to 62.64 percent by 1973, and then rebounded to 64.96 percent by 1982.[5]

The result of these cost developments is that a second wave of reform has been sweeping through workers' compensation in recent years. Whereas the first wave primarily focused on improvements in coverage and adequacy of benefits, the current wave is emphasizing efficiency in the delivery system and restrictions on benefits to those workers who are perceived as receiving awards far in excess of their lost wages. Some aspects of the current reform movement, such as the use of open competition in the rate-setting process for

workers' compensation insurance, are beyond the scope of this study. Much of the recent reform effort, however, has centered on permanent partial disability benefits, with a number of jurisdictions reassessing, and in some cases changing, the procedures or criteria for these benefits.

The pressures for reform of permanent partial benefits often relate to practices that were tolerable only so long as workers' compensation was relatively inexpensive. For example, in states that paid benefits on the basis of the workers' physical impairments, such as Florida and New Jersey, the long-standing approach of litigating almost all cases involving permanent disabilities and routinely making settlements with substantial benefits for minor injuries increasingly became anathema to employers. And in Michigan and other states that conditioned permanent benefits on the occurrence of actual wage loss, the frequency with which substantial benefits were awarded when actual wage losses were questionable—especially in the case of retirees—spurred employers to increasingly feverish efforts for change.

In some states, the first wave of reform was accomplished without triggering the second. In Wisconsin, permanent partial disability benefits had never been out of control, and thus the higher benefits did not produce excessive costs. In other states, the improvements in benefits and coverage resulted in cost increases that precipitated the permanent partial reforms. Florida is the classic example of this sequence. In other states, such as California, the first wave of reform either never was accomplished or was delayed for many years because the concern about misallocation of resources in permanent partial cases surfaced early, forestalling the benefit improvements.

Our research on permanent partial disability benefits began in 1975 and 1976, when we conducted extensive field work for a report submitted to the National Science Foundation (Berkowitz, Burton, and Vroman 1979). The time of this investigation corresponded roughly with the end of the first wave of reform. We updated our information between 1982 and 1986, at a point well into the second wave. Several of the states we examined had made extensive changes between our initial contacts and the 1980s, and part of what we will do is to review the dynamics of reform in recent years. We believe that the current handling of permanent partial disability benefits in many jurisdictions can be understood only by knowing where those jurisdictions were in 1975-76, because it is the responses to problems as they were then perceived that led these states to their current positions.

The problems that existed in the mid-1970s and still exist today are not unique—many are common across states and many are old problems in new guises. Nor are the solutions that the states have endorsed or considered in

recent years unique or new—many of them are old palliatives in new garb. We have seen some states turn to "innovative" approaches that are simultaneously being abandoned in other jurisdictions as deficient. If the states are laboratories of experiment, to use Brandeis's phrase, then it would be nice if they learned from the failures elsewhere. We hope to provide a systematic catalogue of approaches that were discarded with good reason.

Plan of This Volume

The basic concern of our research is the adequacy and equity of permanent partial disability benefits, and the efficiency of the procedures and standards used to provide these benefits. The report contains four parts.

Part I is a general introduction to permanent partial disabilities. Chapter 1 presents a conceptual framework used to view disability among the working age population: terms such as "impairment," "work disability," and "functional limitations" are defined so as to facilitate comparisons among different jurisdictions. Chapter 2 first presents the rudiments of workers' compensation, then reviews the objectives of the workers' compensation program and explains the criteria of adequacy, equity, and efficiency used in this report.

Part II contains our Ten-State Study. The 10 jurisdictions in our sample, which were selected to provide a good representation of the various procedures and standards used to provide compensation payments for permanent disabilities, are California, Florida, Michigan, Nevada, New Jersey, New York, Ohio, Pennsylvania, Wisconsin, and the District of Columbia.[6] An introduction (chapter 3) is followed by chapters examining the states' procedures for permanent partial disability benefits and the criteria used by the states for scheduled benefits and for nonscheduled benefits. (For convenience, we will often refer to the District of Columbia as a state.) Because of the national attention the 1979 changes in Florida's law have received, a separate chapter is devoted to that state.

Part III presents a summary of our Wage-Loss Study. In three of the states in our sample—California, Florida, and Wisconsin—we examined the relationships among workers' disability ratings, the workers' compensation benefits they received, and their actual losses of earnings caused by work-related injuries.

In Part IV we draw on the conceptual materials and data from parts I-III to evaluate the adequacy, equity, and efficiency of the permanent partial disabili-

ty benefits in the jurisdictions examined. The study concludes with a discussion of possible reforms for permanent disability benefits in workers' compensation.

NOTES

1. The sources of data in the first paragraph are provided in Burton and Vroman 1979, footnote 1.

2. The basic nature of the program is described in chapter 2.

3. See table 3.5, below.

4. The 51 jurisdictions are the 50 states and the District of Columbia. The data on benefits in this paragraph are from U.S. Department of Labor (1987), as supplemented by a quarterly release dated January 1, 1986.

5. See table 3.3, below.

6. Chapter 3 explains why these 10 jurisdictions were selected.

CONTENTS

Part I
Introduction to Permanent Partial Disability and Workers' Compensation

1. Disability Among the Working-Age Population: A Conceptual Framework 3
   - Causes of Injury or Disease 3
   - Consequences of Injury or Disease 5
   - Questions to Be Answered 12

2. The Objectives of Workers' Compensation 15
   - The Basic Nature of Workers' Compensation 15
   - Which Causes of Injuries and Diseases Should Be Covered? 17
   - Which Consequences Should Be Compensable? 20
   - What Should Be the Amount of Compensation? 22
   - How Should Compensation Benefits Be Distributed Among Workers? 25
   - How Should the Delivery System for Compensation Benefits Be Evaluated? 26

Part II
The Ten-State Study of Workers' Compensation Procedures and Standards

3. An Introduction to the Ten-State Study 33
   - An Overview of Permanent Disability Cases 33
   - The Selection of Ten States 41
   - Historical Data for the Ten Jurisdictions 45
   - Significance of the Data 66
   - Conclusions 71

4. Procedures for Permanent Partial Benefits 75
   - General Introduction to Procedures 78
   - Administrative Functions for Permanent Disability Cases 83
   - Variations in Procedures Among the States 84
   - Summary and Conclusions 94

5. Scheduled Benefits 99
History of the Schedule 102
Consistency of the Schedules 109
Comparing Benefits Across States 114
Utility of the Scheduled Method of Assessing Permanent Partial Disability 117

6. Nonscheduled Benefits in Impairment (Category I) States 123
Categorization of the States for Nonscheduled Injuries 123
New Jersey 125
Nevada 138
Ohio 148

7. Nonscheduled Benefits in Loss of Wage-Earning Capacity (Category II) States 159
California 159
District of Columbia 186
Wisconsin 193

8. Nonscheduled Benefits in Wage-Loss (Category III) States 211
Definition of the Wage-Loss Approach 211
Pennsylvania 214
Michigan 221
New York 236
Ohio 259

9. The Transformation of Florida to a Wage-Loss State 265
Florida Before Wage-Loss 266
The Florida Wage-Loss Approach to Permanent Partial Disability Benefits 271
Experience with the Wage-Loss Approach 295
Conclusions 309

Part III
The Wage-Loss Study

10. The Wage-Loss Study of California, Florida, and Wisconsin 317
The Conceptual Framework 317
The Wage-Loss Study of Wisconsin 318
The Wage-Loss Study of Florida 330

The Wage-Loss Study of California 339
Comparisons of the Three States 353

Part IV
Evaluation and Possible Reforms

11. Evaluation of Permanent Disability Benefits 365
Replacement Rates as Tests of Adequacy and Equity 365
Adequate Permanent Disability Benefits 371
Equitable Permanent Disability Benefits 373
Efficient Permanent Disability Benefits 379
Conclusions 382

12. Possible Reforms of Permanent Partial Disability Benefits 391
Issues in Designing a Program 391
Evaluation of Policy Alternatives 401
The Wage-Loss Concept in Florida 423
Conclusions 426

List of Tables

3.1 Number of Permanent Disability Cases, U.S. Totals, 1958-82 35
3.2 Average Costs of Permanent Disability Cases, U.S. Averages, 1958-82 37
3.3 Total Costs of Permanent Disability Cases, U.S. Totals, 1958-82 38
3.4 Permanent Disability Cases, 1982: Comparisons of First Report Basis and Ultimate Report Basis 40
3.5 Costs of Permanent Disability Cases, by Jurisdiction, 1982 42
3.6 Number of Permanent Total Disability Cases as a Share of All Cases, 1958-82, in Eight States 47
3.7 Number of Major Permanent Partial Disability Cases as a Share of All Cases, 1958-82, in Eight States 48
3.8 Number of Minor Permanent Partial Disability Cases as a Share of All Cases, 1958-82, in Eight States 50
3.9 Number of All Types of Permanent Partial Disability Cases as a Share of All Cases, 1958-82, in Eight States 51

3.10 Permanent Total Disability Cases in Eight States, 1958-82: Average Costs and Costs Relative to U.S. Averages .. 53

3.11 Major Permanent Partial Disability Cases in Eight States, 1958-82: Average Costs and Costs Relative to U.S. Averages .. 55

3.12 Minor Permanent Partial Disability Cases in Eight States, 1958-82: Average Costs and Costs Relative to U.S. Averages. . 56

3.13 All Types of Permanent Partial Disability Cases in Eight States, 1958-82: Average Costs and Costs Relative to U.S. Averages .. 58

3.14 Total Costs of Permanent Total Disability Cases as a Share of All Cash Benefits, 1958-82, in Eight States 59

3.15 Total Costs of Major Permanent Partial Disability Cases as a Share of All Cash Benefits, 1958-82, in Eight States 61

3.16 Total Costs of Minor Permanent Partial Disability Cases as a Share of All Cash Benefits, 1958-82, in Eight States 62

3.17 Total Costs of All Types of Permanent Disability Cases as a Share of All Cash Benefits, 1958-82, in Eight States 64

3.18 Employers' Costs of Workers' Compensation Insurance as a Percentage of Payroll, 1958-74, in Ten States 67

3.19 Statistical Relationships Between Employers' Costs of Workers' Compensation and the Share of All Cash Benefits Accounted for by Permanent Disability Cases 70

4.1 Administrative Burdens and Resources of the Workers' Compensation Agencies in Ten Jurisdictions 85

5.1 Number of Weeks of Cash Benefits Paid for Parts of Body, January 1, 1986 110

5.2 Scheduled Compensation Benefits as a Percentage of the Loss of an Arm, January 1, 1986 111

5.3 Scheduled Permanent Partial Benefits for Loss of an Arm, January 1986.....115

7.1 Duration of Permanent Partial Benefits in California 161

7.2 Cumulative Duration of Permanent Partial Benefits in California . .161

8.1 Numbers of Cases and Costs of Compensation for Three Types of Nonscheduled Permanent Partial Disability Cases, as a Percentage of All Nonscheduled Permanent Partial Disability Cases, Selected Years, 1970-82 250

8.2 Number of Cases and Cost of Compensation for Scheduled and Nonscheduled Permanent Partial Disability, as a Percentage of All Cases, Selected Years, 1960-83 255

9.1 Numbers and Costs of Permanent Partial Disability Cases in Florida, 1974-79, as Reported by the National Council on Compensation Insurance 296

9.2 Florida Workers' Compensation Insurance Rate Revisions, 1979-86 298

9.3 Permanent Impairment and Wage-Loss Cases in Florida, 1979-85 Injuries 300

9.4 Number of New Wage-Loss Cases in Florida, by Year of Injury, for 1979-85 Injuries 301

9.5 Number of Wage-Loss Cases Receiving Benefits in Florida, by Year, for 1979-85 Injuries 302

9.6 Total Costs of Wage-Loss Cases in Florida, by Year, for 1979-85 Injuries 304

9.7 Developments by 1985 in Number and Cost of Wage-Loss Cases in Florida, 1980-84 Injuries 305

10.1 Wisconsin Uncontested Permanent Partial Disability Cases for Men with 1968 Injuries 322

10.2 Wisconsin Contested Permanent Partial Disability Cases for Men with 1968 Injuries 326

10.3 Florida Regular Permanent Partial Disability Cases for Men with 1968 Injuries 332

10.4 Florida Controverted Permanent Partial Disability Cases for Men with 1968 Injuries 336

10.5 California Informal Permanent Partial Disability Cases for Men with 1968 Injuries 342

10.6 California Formal Permanent Partial Disability Cases for Men with 1968 Injuries 346

10.7 California "Other WCAB" Permanent Partial Disability Cases for Men with 1968 Injuries 350

12.1 Variations on Wage-Loss Benefits 410

List of Graphs and Charts

Chart 1.1 Causes of Injury or Disease 4

Chart 1.2 Possible Consequences of an Injury or Disease 6

Graph 1.1 Economic Consequences of a Work-Related Injury (for Workers with Permanent Disabilities) 11

Graph 2.1 Actual Loss of Earnings for a Worker with a Permanent Disability 24

Graph 2.2 The Efficiency of Workers' Compensation Benefits 27

Graph 3.1 Share of All Cash Benefits Accounted for by Permanent Disability Cases, 1958-72, in Eight States 65

Graph 3.2 Employers' Costs of Workers' Compensation (1984) as a Function of the Share of All Cash Benefits Accounted for by Permanent Disability Cases (1982) 68

Graph 9.1 Cumulative Total Number of Cases and Cumulative Total Cost of Wage-Loss Cases in Florida, 1980-84 Injuries 306

Part I
Introduction to Permanent Partial Disability and Workers' Compensation

Chapter 1
Disability Among the Working-Age Population
A Conceptual Framework

Our ultimate purpose in this study is to prescribe benefits and services for workers who experience permanent disabilities because of work-related injuries or diseases. That prescription is possible, however, only if we provide a proper framework for analysis. Not only do the criteria and procedures used to provide benefits and services to workers with permanent disabilities vary substantially among jurisdictions, but different jurisdictions, as well as different groups and individuals, use different terms to describe the same phenomena. Some, though not all, of the apparent differences among various programs are due to the inconsistent use of terminology.

In describing the conceptual framework to be used throughout this book, we will employ much of the terminology in use within the workers' compensation field, including the terms in the glossaries of *The Report of the National Commission on State Workmen's Compensation Laws* (1972, p. 137) and of the American Medical Association's *Guides to the Evaluation of Permanent Impairment* (1984, pp. 225-27). However, we also take some concepts from literature concerned less with workers' compensation *per se* than with disability programs in general, including the disability insurance program under Social Security.

Causes of Injury or Disease

Chart 1.1 briefly categorizes injuries and diseases. We define an injury as damage to the body resulting from an acute traumatic episode, and a disease as damage to the body resulting from a cause other than an injury. These definitions differ from those usually used within the workers' compensation program. *Injury*, for example, is commonly defined so as to include disease. In some states, this broad use of *injury* results from court interpretations. The original intent of the framers of the legislation, to cover only traumatic episodes, was extended to cover diseases as well, even though these often result from cumulative

nontraumatic episodes. In some other instances, the term *injury* has been broadly applied by design. For example, the model Workmen's Compensation and Rehabilitation Law, prepared by the Council of State Governments in the mid-1960s, defines injury so as to encompass virtually all diseases. We follow the *Report* of the National Commission in treating injury and disease as mutually exclusive (rather than making disease a subset of injury) because this use of the terms is more consistent with generally accepted usage in the medical literature.

An injury or disease can result from one or more of the causes listed in chart 1.1. There are many possible taxonomies, but, consistent with our particular interest, we have indicated a primary division between (1) work-related causes and (2) nonwork-related causes.

Chart 1.1
Causes of Injury or Disease

1. Work-Related	2. Nonwork-Related
(a) employer at fault	(a) congenital
(b) employee at fault	(b) degenerative
(c) neither at fault	(c) other nonwork-related
	(i) other person at fault
	(ii) no other person at fault

One way to subclassify work-related causes is by assignment of fault: in some cases the employer is at fault (1a), in some cases the employee (1b), and in some cases neither party (1c). The term *fault*, of course, can be variously interpreted. For example, it could be taken to mean the standard of negligence defined by traditional tort law; or one could resuscitate the definition of fault acted on in most states in the days before workers' compensation, when employers made effective recourse to several extraordinary defenses against liability in tort suits.

In general, the fault issue is no longer of major significance in workers' compensation (as is discussed in chapter 2, below). It is of some importance, however, when we consider the workers' disability income system and not just the workers' compensation program. For instance,

work-related injuries that result from the negligence of a third party, such as a supplier to an employer, can lead to successful causes of action by employees against the third party under the legal doctrines used in many states.

Several types of nonwork-related causes of injury and disease affect the working-age population. Some workers have congenital conditions, such as blindness, that affect them throughout their lives. Others have degenerative conditions that reflect hereditary predispositions and the toll of aging; heart disease often, though not always, is in this class. Other nonwork-related causes can be divided between those for which a person other than the injured worker is at fault (2c-i in chart 1.1) and those for which no one other than the injured worker is at fault (2c-ii). For example, an off-the-job automobile accident in which a worker is injured may be the fault either of another driver (2c-i) or of the worker himself (2c-ii).

This classification system is designed with an analysis of the workers' compensation program in mind. It reflects the division between work-related and nonwork-related causes, a key element in the workers' compensation program, and it indicates the necessity to go beyond a two-way classification even in workers' compensation. As discussed below, determining whether an injury or disease is work-related, as a criterion for awarding compensation, is not always a straightforward matter, particularly since the causes catalogued in chart 1.1 are *not* mutually exclusive categories. Indeed, for certain types of injuries and diseases, notably back injuries and heart diseases, the relative importance of work-related and nonwork-related factors in explaining the occurrence of the injury or disease is often at issue.

Consequences of Injury or Disease

The various consequences of injury and disease (chart 1.2) can be categorized as temporary and permanent, a distinction that has an important bearing on the types of benefits provided under workers' compensation. The differentiation we utilize between temporary and permanent is consistent with the use of those terms in the *Report* of the National Commission. *Temporary* refers to the period from the onset of injury or disease until maximum medical improvement (MMI) has been achieved; *permanent* refers to the period following MMI.[1] Not every statute would draw the dividing line between permanent and temporary this way. Further, in practice, that line may be unclear. For ex-

ample, in California the "permanent" status is equated with a permanent and stable medical condition, but in fact permanent partial benefits may have to be paid before such a medical condition is reached.

In this book, *temporary* and *permanent* refer to mutually exclusive time periods. All workers who have an injury or disease temporarily experience some or all of the consequences indicated in chart 1.2. A minority of workers also permanently suffer some of those consequences.

Chart 1.2
Possible Consequences of an Injury or Disease

Impairment	Functional Limitations	Work and Nonwork Disability	Other Influences

Impairment and Functional Limitation

The initial consequence of an injury or disease is an impairment. An impairment "is an anatomical, physiological, intellectual or emotional abnormality or loss" (Nagi 1975, p. 8). Similarly, the National Commission *Report* (1972, p. 137) defines permanent impairments as "any anatomic or functional abnormality or loss after maximum medical rehabilitation has been achieved."[2] Examples of impairments are an amputated limb and an enervated muscle.

An impairment can be manifested (and perhaps measured) in several ways. Some manifestations, such as restricted motion or ankylosis, may be regarded as "objective." Subjective manifestations include pain, which may be constant, intermittent, or dependent on the activities undertaken by the worker. Other subjective manifestations are weakness and limited endurance.

The impairment experienced by the worker may *not* lead to functional limitations, the next concept shown on chart 1.2. When it does not, we term it "nonlimiting." More often, however, impairments do give rise to functional limitations (or limitations in the worker's performance).[3]

> Although overlapping in some respects, three dimensions of performance are . . . separable: physical, emotional and mental. Physical performance refers to sensory-motor functioning of the organism as indicated by limitations in such activities as walking, climbing, bending, reaching, hearing, etc. Emotional performance refers to a person's effectiveness in psychological coping with life stress and can be manifested through levels of anxiety, restlessness, and a variety of psycho-physiological symptoms. Mental performance denotes the intellectual and reasoning capabilities of individuals which have been most commonly measured through problem-solving (I.Q.) tests. (Nagi 1975, p. 3)

A few examples may clarify some of the terms we have introduced:

(1) *Temporary nonlimiting impairment.* A worker is injured by flying glass, which inflicts a minor laceration on his arm. The result is a physiological disturbance of the skin (impairment). However, the wound is cleaned and bandaged, and is completely healed in a few weeks. Even during the healing period, the impairment is not limiting; that is, there are no resulting functional limitations.

(2) *Temporary limiting impairment.* A falling box breaks a worker's great toe. The result is a physiological disturbance of the bone structure (impairment), which manifests itself in pain and, after the bone is set, in temporary ankylosis. During the healing period, the impairment limits the worker's ability to walk and climb (functional limitations). After the healing period is over, however, there is no residual impairment.

(3) *Temporary limiting impairment and permanent nonlimiting impairment.* A worker is scalded on his back by hot acid. The temporary result is burnt tissue (impairment), accompanied by pain and weakness, which results in temporary inability to bend and lift (functional limitations). After the healing period, the worker's back is still scarred (impairment) and painful when touched, but the worker is able to bend, lift, and perform all other activities he could before his injury.

(4) *Temporary and permanent limiting impairments.* A falling box strikes a worker's back and causes a compression fracture of a vertebra (impairment), which manifests itself in pain and complete loss of motion in the back. During the healing period, the worker is unable to walk, bend, and so on (functional limitations). Even after maximum

medical rehabilitation is reached, a physical abnormality (impairment) remains and the worker has limited motion in his back. Moreover, when the worker is asked to lift a 25-pound object, he is weak (barely able to lift the object), he experiences increasing levels of pain with continued lifting, and he is only able to lift the object twice (limited endurance). These manifestations of his impairment (weakness, pain, and limited endurance) are indications of a functional limitation (inability to lift).

These examples enable us to contrast the varying approaches to the assessment of impairment and functional limitations. The AMA *Guides*, for example, largely confine the measurement of impairment to objective manifestations, such as restricted motion. The reason given (1971, p. iii) is that "competent evaluation of permanent impairment requires adequate and complete medical examination, accurate objective measurement of function, and the avoidance of subjective impressions." Subjective manifestations of impairment, however, are considered important for certain types of injuries and diseases by workers' compensation programs in a number of jurisdictions, such as California. Thus a medical examiner following the AMA *Guides* approach in evaluating the extent of permanent impairment in example (4) above would confine himself to determining the limitations of motion in the back, whereas, following the California approach, he would also consider the subjective manifestations of pain, weakness, and limited endurance.

Disabilities

As a result of functional limitations, a worker may experience a disability. A broad definition of disability is offered by Nagi (1975, pp. 3-4): "inability or limitations in performing social roles and activities such as in relation to work, family, or to independent community living." We distinguish two types of disability in chart 1.2, namely, work disability, a loss of actual earnings or earning capability as a consequence of the impairment, and nonwork disability, the other consequences for the worker included in Nagi's broad definition.

In much of the literature on disability, including the *Report* of the National Commission, that term has been treated as synonymous with *work disability* as defined above. *Nonwork disability*, as defined above, is not included in the glossary of the *Report*, but for our purposes it is worthwhile to recognize the consequences for workers resulting from functional limitations other than the consequences for the work role. In later chapters, however, when we use the term *disability* without

the modifier *work* or *nonwork*, we intend it to mean *work disability* as defined here.

As mentioned, not all impairments are attended by functional limitations. Similarly, not all functional limitations are attended by a disability; some functional limitations are "nondisabling." For example, an impairment may render a worker unable to lift heavy objects, but lifting ability may be irrelevant to the worker's job (college professor).

Other Influences on Disabilities

One aspect of both the work disability and the nonwork disability concepts is that the extent of a given worker's disability depends not only on the extent of his functional limitations but also, as indicated in chart 1.2, on other influences. For example, the loss of actual earnings or decrease in earning capacity (that is, work disability) depends not just on functional limitations, but on the worker's personal characteristics (age, education, experience, and other factors), the labor market conditions in which he must compete for employment, and the sources of assistance available to him (including cash benefits, such as workers' compensation and welfare, and other assistance, such as medical care and rehabilitation services).

Age, education, and previous work experience are examples of personal characteristics that might interact with a worker's functional limitation to affect the extent of his work disability. Thus an older worker with a given impairment may have more difficulty finding employment than a younger worker with the same impairment. An employer may be reluctant to pay for retraining the older worker, given his relatively short expected job tenure. Also, a given functional limitation may affect a highly educated worker less than a poorly educated worker, because the more educated worker is likely to rely on mental rather than physical skills for his job market success. Similarly, a worker with greater experience prior to his work-related injury or disease, who can draw on this reservoir of skills to overcome a functional limitation, may also have an easier adjustment.

The relationships among functional limitations, workers' personal characteristics, and work disabilities are complex, and only relatively few hypotheses describing them have been adequately tested in terms of actual labor market experience; great care must therefore be taken in making judgments about them. An important general point, however, and one that appears quite likely on the basis of what we know about

the operation of the labor market from studies by economists, is that any factor that may influence the employability of a worker, whether it be a functional limitation, age, education, or other personal characteristic, will interact with the other factors in determining the earnings experience of that worker.

The actual work disability experienced by workers with functional limitations will also be affected by general labor market conditions. It seems likely that workers with functional limitations will be more adversely affected when labor market conditions deteriorate than workers who are otherwise equivalent except for the functional limitations.

The extent of work disability (and nonwork disability) that results from a particular functional limitation also depends on the sources of assistance for disabled workers. Here it is useful to draw a distinction between work disability in the sense of loss of wage-earning capacity and disability in the sense of loss of actual earnings. The actual loss of earnings for a worker with a given functional limitation will certainly depend in part upon the alternative sources of income for the worker and his family. Thus, as workers' compensation benefits are increased, at least beyond certain limits, a worker's incentive to overcome a given functional limitation and return to work may decline. Because of this effect, disability (earnings loss) may increase as workers' compensation benefits increase. The same relationship can be expected for increased availability of benefits from programs such as disability insurance, welfare, and private pension plans.

We do not want to suggest that we are opposed to increases in benefit levels for these programs. Indeed, one of the purposes of workers' compensation benefits is to reduce the pressures on workers to return to work under onerous conditions. There are complex policy issues (discussed later in this book) concerning the proper trade-off between the work disincentive effects of higher benefits and the purpose of providing workers adequate support in a period of adversity. The main point here is simply that the extent of disability (as measured by earnings loss) in the working age population is affected by the nature of the income programs available to disabled workers.

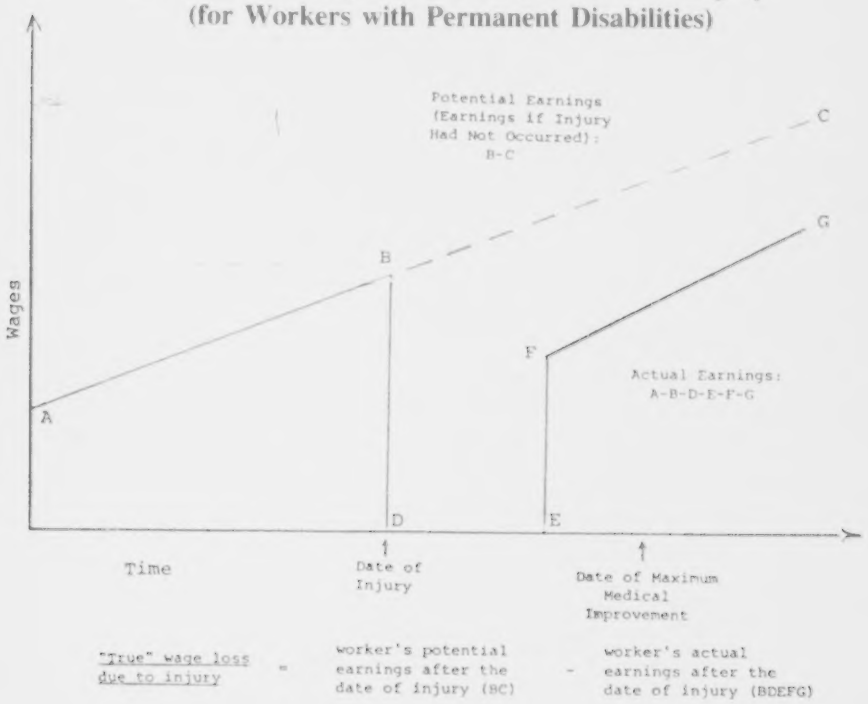
Disabled workers have sources of assistance other than cash benefits, including medical care and rehabilitation services. At a conceptual level, it is again important to stress that the quality and quantity of these other forms of assistance are interrelated with the extent of work disability and nonwork disability that will occur for a worker with a functional

limitation. For example, a worker whose work-related back injury makes it impossible to continue a previous job involving lifting may, after rehabilitation, find a new job, such as sales work, in which his functional limitation does not affect his work performance.[4]

Actual Loss of Earnings

Graph 1.1 illustrates an example of the actual loss of earnings resulting from a work-related injury or disease. In this example, wages increased through time from A to B, reflecting the worker's increasing productivity, as well as economywide inflation. At point B, the worker experienced a work-related injury that permanently reduced his earnings. Had he not been injured, his earnings would have continued to grow along the line B-C. Although these potential earnings cannot be observed, they can be estimated from information such as the worker's preinjury earnings, age, occupation, and work experience. The worker's *actual* earnings in this example dropped from B to D and continued

Graph 1.1
Economic Consequences of a Work-Related Injury
(for Workers with Permanent Disabilities)



at this zero earnings level until point E, when the worker returned to work at wage level F. Thereafter, actual earnings grew along the line F to G. As this example is drawn, it is assumed that the worker's actual earnings never return to the potential earnings (line BC) that he would have earned if he had never been injured.

Of course, not all workers with permanent impairments or permanent functional limitations have wage histories that correspond to the example in graph 1.1. Some may return to their old jobs at the wages they would have earned if they had never been injured; others may experience a total loss of earnings after their injuries. The example shown illustrates an intermediate case, in which the worker has a partial but not total loss of earnings.

As previously discussed, permanent disability cases are defined as those for which the worker has consequences that extend beyond the date of maximum medical rehabilitation, or maximum medical improvement (MMI). In a workers' compensation program, the date of MMI is when the worker's medical condition is considered stable, so that he can be rated for the purposes of deciding the permanent disability benefits to which he is entitled. For the case illustrated in graph 1.1, MMI occurs after the worker returns to work, which is a typical sequence.

Questions To Be Answered

The conceptual framework presented in this chapter raises several questions which must be answered by any program that compensates disability. These include:

(1) Which causes of injuries and diseases (as shown in chart 1.1) should be covered by the program?

(2) Which of the consequences of an injury or disease (as shown in chart 1.2) should be compensable? That is, should temporary consequences or permanent consequences or both be compensable? And which of impairments, functional limitations, work disability, and nonwork disability should be compensable?

(3) What should be the amount of compensation for those consequences that are compensable?

(4) How should compensation benefits be distributed among workers?

(5) How should the delivery system for compensation benefits be evaluated?

The next chapter develops some answers to these questions.

NOTES

1. The glossary of the 1972 National Commission *Report*, in defining permanent impairment, indicates that permanent means the medical condition must be declared stable or nonprogressive by a physician (p. 137).

2. The definition of permanent impairment contained in the glossary of the National Commission's *Report* is virtually identical to the definition in the 1st edition of the AMA *Guides* (1971, p. iii). The 2nd edition of the AMA *Guides* (1984, p. 225) defines impairment as "the loss of, loss of use of, or derangement of any body part, system or functions" and permanent impairment as "impairment that has become static or well stabilized with or without medical treatment, or that is not likely to remit despite medical treatment of the impairing conditions."

3. We rely on the classification system developed by Nagi (1975), which distinguishes among impairments, functional limitations, and disability. The definition of impairment in the AMA *Guides* (1984, p. 225) includes functional limitations, and thus has only two consequences of an injury or disease: impairment and disability. Another three-consequence classification system published by the World Health Organization (1980) utilizes impairment (which includes functional limitations), disability, and handicap. The Nagi system is the most useful in explaining the operational approaches in workers' compensation.

4. Medical care and rehabilitation services will also affect the extent of impairment and functional limitation that result from a given injury or disease, a relationship not shown in chart 1.2. Although this is an important relationship, it is largely beyond the scope of this study.

Chapter 2
The Objectives of Workers' Compensation

The Basic Nature of Workers' Compensation

There is a workers' compensation act for each of the 50 states and for the District of Columbia. There also are two federal workers' compensation programs.[1] No two acts are exactly alike, but most have similar basic features.[2]

Workers' compensation provides cash benefits, medical care, and rehabilitation services for workers who suffer work-related injuries and diseases. To be eligible for benefits, normally an employee must experience a "personal injury by accident arising out of and in the course of employment." All of the laws provide benefits for workers with occupational diseases, although many states restrict the coverage of occupational diseases through provisions such as minimum duration of exposure rules.

In general, the effect of the phrase "personal injury by accident arising out of and in the course of employment" is to exclude some injuries and diseases from the scope of the program. However, the distinguishing feature of workers' compensation is that it provides benefits for many workers who could not win suits for damages under the common law because of the difficulty of proving that the employer was at fault. Workers' compensation benefits are paid even when the employer is free of negligence or other fault; they are the employer's exclusive liability for work-related injuries and diseases.

When an injury or disease falls within the scope of the workers' compensation program, the employer must furnish medical care, usually unlimited in time and amount. Most states also provide vocational and medical rehabilitation services, or supervise the services if they are furnished by the employer. In addition, all states require the employer to pay cash benefits to the worker if certain conditions are met.

Cash benefits usually are classified as temporary total, temporary partial, permanent total, permanent partial, and death benefits. After a specified waiting period, temporary total benefits are paid if the employee is unable to work. The benefits continue as long as the worker remains totally but temporarily disabled. Temporary partial benefits are paid during a period of reduced earnings and continue until the worker returns to full wages or is found eligible for permanent total or permanent partial benefits. Permanent total benefits are paid to a worker disabled completely for an indefinite time. *Permanent partial benefits are paid if the worker incurs an injury or disease that causes a permanent impairment or if the worker experiences a permanent but partial loss of wages or wage-earning capacity.* Death benefits include burial expenses and benefits to specified dependent survivors. For each category of benefits, each state prescribes a maximum weekly benefit and usually a minimum weekly benefit. Some states prescribe limits on the duration or total amount for certain benefits, including permanent partial, permanent total, and death benefits.

In all but four jurisdictions, an administrative agency adjudicates disputes concerning eligibility for benefits and extent of disability. Decisions of these agencies may be appealed for review by the courts. In four states, the courts decide all of the disputed claims.

Despite the role of the states in workers' compensation, it is largely a privately administered and funded program. The workers' compensation statutes provide that each employer shall compensate disabled workers using specified formulas for benefits, but normally the employer has some choice about how to provide these benefits. In all but three states, the employer, if it can meet the state financial standards, may self-insure the risk of work-related injuries and diseases. In 45 jurisdictions, the employer may purchase workers' compensation insurance from private insurance carriers. There are 19 states that operate insurance funds, but 13 of these compete with private carriers. Faced with these choices, employers usually make private insurance arrangements to meet their statutory obligations. In 1984, private insurance carriers were responsible for 59.3 percent of all benefits paid, self-insurers for 20.3 percent, and government funds for 20.4 percent.[3]

Workers' compensation benefits are financed by charges in the form of insurance premiums and rates related to the benefits paid. The relationship between benefits paid and the employers' costs is most direct for self-insuring employers. Other employers are rated on the experience

of their class by state insurance funds or private carriers. Typically, several hundred insurance classifications are used in each state. The individual employer usually pays a rate related to the benefits paid by all employers in his class, but employers with sufficiently large premiums can have their rates modified to reflect their own record of benefit payments relative to other firms in their class.[4]

This brief description of workers' compensation serves as a starting point for answering the questions posed in chapter 1.

Which Causes of Injuries and Diseases Should Be Covered?

Which of the several causes of injuries and diseases enumerated in chart 1.1 should be covered by the workers' compensation program? The origin of the workers' compensation program provides some guidance to the answer.[5]

Industrial accident rates reached their all-time peak in the first decade of this century. For example, in 1907 over 7,000 workers were killed in just two industries—railroading and bituminous coal mining. Especially in view of the enormity of the industrial injury problem, the schemes available to compensate disabled workers were deficient.

Employees were required to bring legal actions against their employers based on the common law. The worker was the plaintiff in such cases, and therefore had the burden of proving the employer's negligence. Given the complexity of the work situation and the reluctance of fellow workers to testify for fear of losing their jobs, the worker often found himself unable to carry this burden of proof. Moreover, the employee was at a disadvantage because of the availability to the employer of

> that "unholy trinity of defenses": (1) *contributory negligence*—the worker could not recover if he himself had been negligent in any degree, regardless of the extent of the employer's negligence; (2) *the fellow-servant doctrine*—the employee could not recover if it could be shown that the injury had resulted from the negligence of a fellow worker; (3) *assumption of risk*—the injured man could not recover if injury was due to an inherent hazard of the job of which he had, or should have had, advance knowledge (Somers and Somers 1954, p. 18).

The grossest deficiencies of the common law soon became apparent, and dating from the 1850s there were legislative attempts, known as

employers' liability laws, to modify these common law defenses. These laws still forced the employee to prove employer negligence, however, and their contribution to the ability of injured workers to recover from their employers was minimal.

Several shortcomings of the common law and the employers' liability laws were generally acknowledged. A system that protected workers only when someone was negligent was an anachronism: accidents were often an inevitable result of hazards inherent in industrial employment. Awards were glaringly inconsistent, ranging from nil to substantial. Society was forced to assume a burden in the form of "charity" for uncompensated injured workers. In short, as Arthur Larson has observed, "the coincidence of increasing industrial accidents and decreasing remedies had produced in the United States a situation ripe for radical change" (National Commission 1972, p. 34).

Most of the numerous objectives for a new system of compensating injured workers took their inspiration from the weaknesses of the common law. The new program was to provide benefits that were predetermined and adequate. The payments were to be prompt and certain, primarily to eliminate wasteful litigation. Adequate medical and rehabilitation services were to be provided. And the most radical objective was the establishment of an entirely new economic and legal principle—liability without fault. This principle would make it much easier for employees to recover. In turn, employers were to receive a limit on their liability. Workers' compensation benefits were to be the only recovery against the employer, and there was to be no possibility of a negligence suit against the employer.

The origins of the program thus support the idea of broad coverage of work-related injuries and diseases, since that approach helps overcome the deficiencies of the common law. More recently, the National Commission on State Workmen's Compensation Laws has endorsed the approach. One of the five objectives for a modern workers' compensation program spelled out in the Commission's *Report* (1972, p. 35) is broad coverage of employees and work-related injuries and diseases: "Workmen's compensation protection should be extended to as many workers as feasible, and all work-related injuries and diseases should be covered."

Workers' compensation statutes generally meet the objectives of broad coverage of work-related injuries and diseases. Several qualifications must be added, however. The idea of broad coverage includes the no-

tion that fault of the employer or employee is irrelevant. Nonetheless, some states do permit extraordinary recoveries for workers whose damages result from particularly egregious conduct by employers. Conversely, some states will reduce the worker's benefit under workers' compensation when the worker's injury or disease can be traced to his own gross misconduct.

The counterpart of making all work-related injuries and diseases compensable is to make all injuries and diseases arising from nonwork-related causes noncompensable in the workers' compensation program. The argument for noncompensability provided by the National Commission *Report* (1972, p. 51) is that the function of workers' compensation

> is not to protect against all sources of impairment or death for workers. One of its objectives is to provide incentives to employers to improve their safety record. Impairments to his workers from non-work-related sources are largely beyond an employer's control. Moreover, there are many private and public benefits which are available to workers and their families regardless of the source of disability or death. Therefore, despite our sympathy for resolving doubts in favor of employees, we would not extend workmen's compensation to cover impairment and deaths that are not work-related.

A particularly difficult matter, at least conceptually, is establishing the extent of the employer's liability when an injury or disease is determined to be a result of both nonwork- and work-related causes. The National Commission noted that "in general an employee has been eligible for full workmen's compensation benefits if any nontrivial portion of his disability was due to a work-related source" and recommended that full workers' compensation benefits be paid "if the work-related factor was a significant cause of the impairment or death" (National Commission 1972, p. 51). Although this policy has been accepted in principle in most jurisdictions, substantial practical problems remain in determining causality. In most states, the issue of cause must be resolved by deciding whether the fact situation in a particular case meets the "arising out of and in the course of" tests. Often the "facts" are complex or ambiguous or both, and it is difficult to decide. In most jurisdictions, however, once work-related factors are established as being of some significance, the relative importance of the work-related and nonwork-related factors becomes secondary.[6]

Despite the general practice and the Commission's recommendation, some states, such as California, adjust the amount of workers' compensation benefits according to the relative importance of work-related and nonwork-related causes of damages. Among the more important and common cases in which factual determination of the relative importance of each factor can become quite difficult are those involving heart damage, which may result from an interaction of congenital, degenerative, and work-related factors; and those involving diabetes, which, although its etiology includes hereditary and degenerative processes, can be aggravated by an incident or a condition of work.

The complexities of workers' compensation and its concern with determining the causes of injuries or diseases are considerable. Putting those complexities aside for the present, it is sufficient to restate two simple generalizations about the treatment in workers' compensation laws of the causes of injuries or disease: eligibility is conditioned upon the presence of a work-related cause of injury or disease; and, with minor exceptions, once that cause is established, determination of whether the work-related cause was due to the employee's or employer's fault, and of whether there were also nonwork-related factors present, are irrelevant.

Which Consequences Should Be Compensable?

As outlined in chapter 1, the permanent consequences of work-related injuries and diseases include impairments, functional limitations, work disability, and nonwork disability. This section reviews some of the judgments made about which of these consequences should be compensable.

This review is complicated by two factors. First, those who comment on the goals of workers' compensation generally do not use a conceptual framework as elaborate as the one used in this report. Second, and more serious because the consequences are sequential and interdependent, a particular consequence may be endorsed as compensable because it serves as a convenient proxy for other consequences that are the primary concern of the commentator. Thus, a commentator may argue that impairments should be compensated when the real concern is for work disabilities and nonwork disabilities that generally flow from the impairments. An indirect route to compensate these disabilities may be chosen because impairments may be easier to measure than disabilities. Unfortunately, the commentators who favor payment

for impairments do not always make clear whether this payment is for the existence of an impairment by itself or as a proxy for a disability.

The National Commission on State Workmen's Compensation Laws considered the question of which consequences of work-related injuries and diseases should be compensable. The Commission defined two types of cash benefits (1972, p. 54): *impairment benefits*, paid to a worker with an impairment caused by a work-related injury or disease, whether or not any wage loss results; and *disability benefits*, paid when an employee has impairment and actual or potential wage loss, both due to a work-related injury or disease. The *primary basis* for permanent partial benefits, the National Commission concluded, should be disability, although impairment can also serve as a secondary basis for this type of benefit.

The National Commission placed primary emphasis on disability as a basis for benefits because it concluded that one of the basic objectives of a modern workers' compensation program is the substantial protection against loss of income. Both the National Commission's description of disability benefits and its rationale for those benefits indicate that its concept of disability accords with the concept of "work disability" as used in this study.

It is necessary to reconcile the National Commission's "impairment benefits" with the concept used in this paper. The glossary of the National Commission's *Report* defines impairment in terms virtually identical to those used in chapter 1. The rationale offered by the National Commission (1972, p. 38) for impairment benefits, however, is that "many workers with work-related injuries or diseases experience losses which are not reflected in lost remuneration. Permanent impairment involves lifetime effects on the personality and on normal activity"—a description broad enough to include some of the aspects of functional limitations and nonwork disability as defined in chapter 1. The National Commission thus appears to have based its impairment benefits not on impairment *per se* but on impairment as a convenient proxy for the functional limitations and nonwork disability that result from the impairment.

Arthur Larson, the leading legal scholar in workers' compensation, stresses the primary importance of work disability (as that term is used in this study) as the basis for benefits (1973, pp. 33-34). He recognizes that some jurisdictions pay benefits based on evaluations of impairments, but argues that such evaluations are made only as rough estimates of actual or potential disability. The jurisdictions, in short, compensate

the impairment because it serves as a proxy for work disability. Larson sees disability benefits as serving the social purpose of allowing workers to maintain their incomes in periods of distress, but payments for impairments *per se* as in the nature of recompense for damages, a concept more appropriate to negligence cases than to a social insurance program. Workers' compensation should cover medical and legal expenses related to the work injury, however, lest the income-sustaining purpose of the benefits be undermined.

The National Commission's and Larson's views on compensability do not represent the full range of approaches that have been offered. They are typical, however, in their argument that work disability should be the primary, if not exclusive, basis for permanent partial benefits. The National Commission's argument that impairment (and, inferentially, functional limitations and nonwork disability) is also a suitable basis for permanent partial benefits, although unusual, is not without precedent.

What Should Be the Amount of Compensation?

Once the issue of which permanent consequences of work-related injuries and diseases should be compensated has been decided, the next question is how much compensation to award. One criterion for evaluating permanent partial benefits is that they should be adequate.

Adequacy of Disability Benefits

The National Commission defines *adequate* as "delivering sufficient benefits and services to meet the objectives of the program." For disability benefits, the relevant objective of the program is to "provide substantial protection against interruption of income." The rationale for providing *substantial* benefits, tied to the worker's loss of income, rather than an amount tied to the worker's economic needs, is that workers' compensation is an insurance program, not a welfare program (National Commission 1972, pp. 36-38). The history of workers' compensation, which distinguishes that program from other forms of social insurance, supplies the justification for offsetting a substantial proportion of the loss of income in the form of benefits. In exchange for the benefits provided by workers' compensation, workers surrendered their right to sue their employers in common law for full damages including pain and suffering. (One reason for limiting workers' compensation cash benefits to less than the full amount of lost income, on the other hand, is that benefits nearly equal to lost income might seriously reduce workers' incentive to return to employment.)

The National Commission did not make specific recommendations for permanent partial disability benefits that would permit a translation of providing "substantial protection against interruption of income" into a numerical or quantitative standard. For temporary total and permanent total disability, the National Commission recommended that, subject to the state's maximum weekly benefits, the total disability benefits be at least two-thirds of the worker's gross weekly wage.[7] If a similar degree of protection were provided for permanent partial disability, the permanent partial disability benefits would be two-thirds of the difference between the worker's earnings (or earning capacity) before and after the injury or disease.

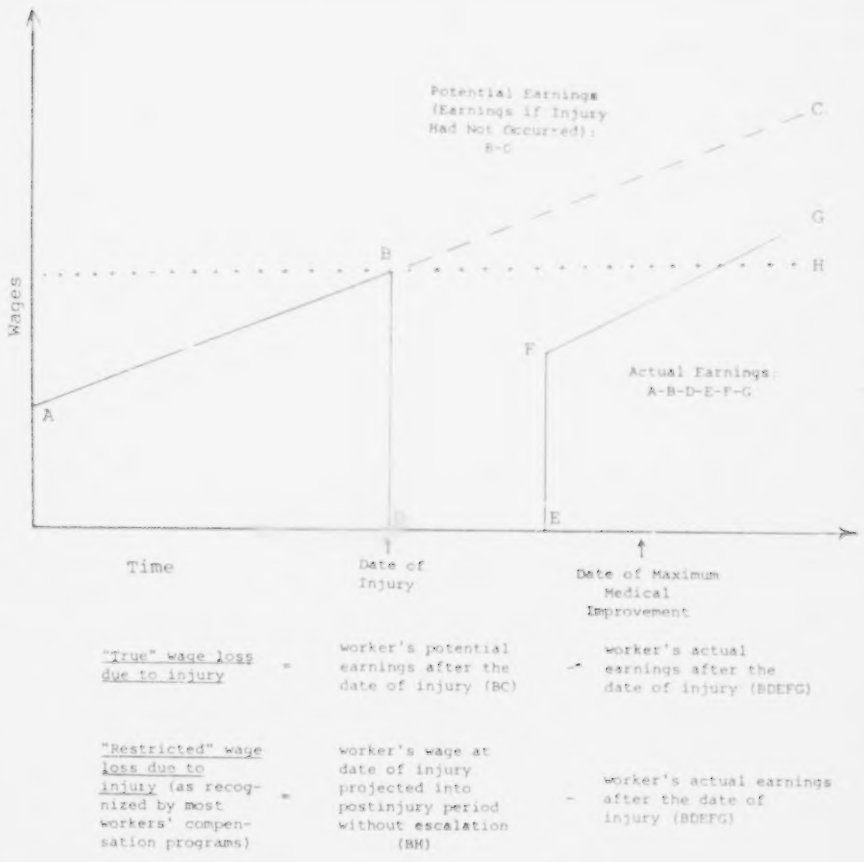
This definition of adequacy can be visualized by use of graph 2.1, which is a modified version of graph 1.1.

The measure of earnings loss used in the discussion of graph 1.1 corresponds to what is labeled on graph 2.1 as "true" wage loss. This measure of wage loss is equal to the worker's potential earnings after the date of injury (BC) minus the worker's actual earnings after the date of injury (BDEFG). Although this version of wage loss is appropriate for many purposes, including the assessment of the total consequences of a work-related injury, it is not the measure of wage loss typically encompassed in a workers' compensation statute. Rather, the statute usually measures what is termed in graph 2.1 as "restricted" wage loss. That is, the worker's earnings as of the date of injury, which were at level B, are projected into the future at that level, namely along the line BH. Then the "restricted" wage loss that serves as a basis for workers' compenation benefits is measured as the difference between the line BH and the worker's actual earnings after the date of injury (BDEFG). As is obvious, the "restricted" wage loss is smaller than the "true" wage loss. Indeed, there is a date at which the actual earnings line FG crosses the line BH, which means there is no additional "restricted" wage loss after this date even though there is continuing "true" wage loss.

Adequacy for temporary total disability benefits using this restricted definition of wage loss requires that 66 2/3 percent of the area lying above DE and below BH be replaced by benefits. Adequate temporary partial disability benefits requires that 66 2/3 percent of the area between BH and FG be replaced between the time the employee returns to work (EF) and the date the medical condition stabilizes (the date of maximum medical improvement, or MMI). For permanent partial

disability benefits to be adequate, 66 2/3 percent of the area between BH and FG must be replaced after the date of MMI.[8] (These examples assume the worker's benefits are not affected by maximum or minimum weekly benefit amounts.)

Graph 2.1
Actual Loss of Earnings for a Worker with a Permanent Disability


Potential Earnings (Earnings if Injury Had Not Occurred): B-C
C
G
B
H
Wages
F
Actual Earnings: A-B-D-E-F-G
A
D
E
Time
Date of Injury
Date of Maximum Medical Improvement
"True" wage loss due to injury = worker's potential earnings after the date of injury (BC) − worker's actual earnings after the date of injury (BDEFG)
"Restricted" wage loss due to injury (as recognized by most workers' compensation programs) = worker's wage at date of injury projected into postinjury period without escalation (BH) − worker's actual earnings after the date of injury (BDEFG)

Adequacy of Impairment Benefits

Adequacy for impairment benefits is not well defined by the National Commission. The *Report* (1972, p. 38) indicates that impairment benefits "should be of secondary importance" and "limited in number and amount." In a discussion of suggestions for restructuring permanent partial benefits (pp. 68-70), a scheme for impairment benefits is of-

fered which relates the duration of the benefits to the extent of the worker's impairment compared to total impairment. If total impairment were defined as warranting 400 weeks of benefits, a worker with 50 percent impairment would receive 200 weeks of benefits. The *Report* does not, however, suggest an appropriate amount of weekly benefits, which leaves the scheme incomplete.[9]

The National Commission, although obviously not specifying exactly what was meant by "limited," did offer several reasons why the impairment benefits should be limited. One is the historical exchange, or *quid pro quo*, which established the principle of liability without fault in exchange for limited benefits (National Commission 1972, p. 38). Another reason for limited impairment benefits is a concern for efficiency. Since the determination of the degree of impairment is inherently complicated and expensive, by limiting impairment benefits the Commission felt it would be providing for "far less time consumed in evaluating such claims" (National Commission *Report*, p. 38). Presumably, time would be saved because the relatively low amount of the impairment benefits would reduce the incentives for litigation, or because benefits for minor permanent impairments would be proscribed. (See National Commission 1972, p. 70.)

How Should Compensation Benefits Be Distributed Among Workers?

The second criterion for permanent partial benefits is that they should be equitable. The National Commission defines *equitable* as "delivering benefits and services fairly as judged by the program's consistency in providing equal benefits or services to workers in identical circumstances and its rationality in providing benefits and services in proportion to the impairment or disability for those with different degrees of loss" (1972, p. 137).[10]

Equity of Disability Benefits

The application of the equity criterion to disability benefits is fairly straightforward at an abstract level. Workers with equal losses of earnings (or losses of earning capacity) should receive equal benefits; workers with different losses should receive benefits proportionate to their losses. The difficulties become much more severe when the equity criterion is applied to real-world situations (a generalization also true of the adequacy criterion). As indicated in chart 1.2, the extent of work disabili-

ty proceeds not only from the workers' functional limitations, but from their interaction with a variety of other influences (age, education, and so on). For a given worker who is earning less after a work-related injury or disease than before, the drop in earnings may be due to a work disability (caused by his functional limitations interacting with the other influences) or to factors entirely unrelated to his work-related injury or disease (he won the Illinois lottery and decided to retire, or was arrested for gambling and incarcerated). Until the cause of the drop in earnings is ascertained (and there are likely to be multiple causes), it is not possible to determine if the assigned benefits are equitable compared to other workers' benefits (or, for that matter, adequate).

Equity of Impairment Benefits

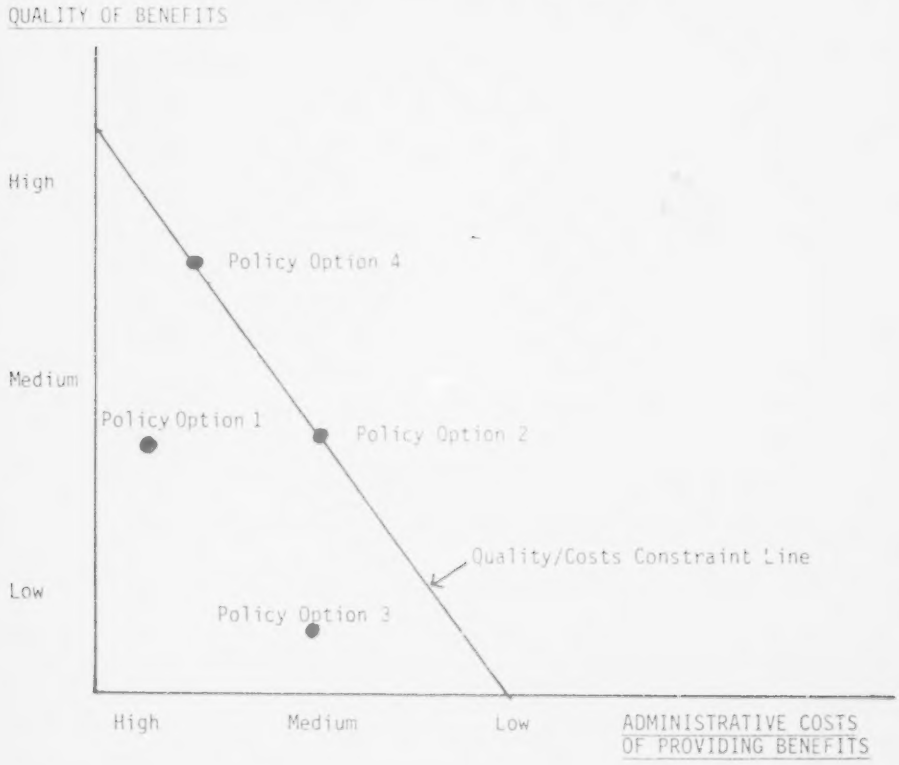
The application of the equity criterion to impairment benefits also is fairly straightforward at an abstract level. Workers with equally serious impairments should receive equal benefits, and workers with different degrees of impairment should receive proportionately different benefits. One problem is that the measurement of impairment is at best controversial and at worst almost impossible (some of the difficulties are discussed in part II). Another problem is that sometimes impairment benefits are meant to compensate not only for impairment *per se* but also for a worker's functional limitations and nonwork disabilities, and it is exceedingly difficult to determine the extent of these other losses. For example, the extent of nonwork disability is a result of complex interactions among such factors as the worker's functional limitations, age, education, and family situation. The problem of determining the extent of nonwork disability makes it difficult to assess the adequacy and equity of benefits that are meant, at least in part, to compensate for nonwork disability.

How Should the Delivery System for Compensation Benefits Be Evaluated?

The benefits and services in workers' compensation are provided by a delivery system comprising employers, carriers, state agencies, attorneys, and doctors that was briefly described in the first section of this chapter. How should this delivery system be evaluated? The third criterion for permanent partial benefits is that they should be provided efficiently. The term *efficiency* is used in this study to describe two concepts, which are illustrated in graph 2.2. The horizontal axis measures the administrative costs of providing benefits incurred by the participants

in the workers' compensation delivery system, including employers, insurance carriers, workers, attorneys, and state agencies. The vertical axis measures the quality of the workers' compensation benefits, where quality is assessed on the basis of one or more criteria such as adequacy and equity. Graph 2.2 is constructed so that the desired outcomes (high quality and low costs) are furthest from the origin.

Graph 2.2
The Efficiency of Workers' Compensation Benefits



One meaning of efficiency, which will be termed *panoramic efficiency*, is that benefits of a particular quality are provided at the least possible administrative costs. A complementary definition of panoramic efficiency is that benefits of the highest possible quality are obtained for a given amount of administrative costs. Panoramic efficiency is illustrated by the difference between policy option 1, which has high administrative costs and medium-quality benefits, and policy option 2, which also has

medium-quality benefits but lower administrative costs. Moving from policy option 1 to policy option 2 (perhaps by ending unnecessary litigation) improves panoramic efficiency. Policy option 2 lies on the quality/costs constraint line, which means that the administrative costs cannot be further reduced for medium-quality benefits.[11]

Panoramic efficiency is also illustrated by the difference between policy option 3, which has medium administrative costs and low-quality benefits, and policy option 2, which has medium administrative costs and medium-quality benefits. Moving from policy option 3 to policy option 2 (perhaps by increasing the level of benefits in a state with inadequate benefits) improves panoramic efficiency.

Another meaning of efficiency, which will be termed *myopic efficiency*, is only concerned with reducing administrative costs, without concern for the quality of the program. Myopic efficiency is illustrated by the difference between policy option 2, which has high administrative expenses, and policy option 4, which has medium administrative expenses. Moving from policy option 4 to policy option 2 thus reduces administrative costs. Because it is impossible to move outside the quality/cost constraint line, however, the movement from policy option 4 to policy option 2 requires a reduction in the quality of benefits. Myopic efficiency means that the move from policy option 4 to policy option 2 is made, regardless of the decline in quality of benefits, solely because of the reduction in administrative costs.[12]

As indicated by graph 2.2, the three criteria—adequacy, equity, and efficiency—are to some extent competitive. A reduction in litigation expenses can improve efficiency without reducing equity if a horizontal move can be made toward the quality/costs constraint line. But eventually, further reductions in administrative expenses can be achieved only by movements along the constraint line, which represents only a gain in myopic efficiency because of the reduction in the quality of the program. These trade-offs among the criteria are examined at length in part IV of this study.

NOTES

1. The federal programs are the Federal Employees' Compensation Act, which is applicable to federal employees, and the Longshoremen's and Harbor Workers' Compensation Act, which is applicable to employees working on navigable waters, excluding the master or crew of a vessel. These federal programs are beyond the scope of this study, which is concerned with the 51 jurisdictions—the 50 states and the District of Columbia. As used in this study, the term *state* includes the District of Columbia.

2. This section is adapted from material at pp. 32-33 of the National Commission *Report* (1972). Current data are from U.S. Dept. of Labor, *Administration Profiles* (1985) and U.S. Dept. of Labor, *State Laws* (1986).

3. The percentages are for data excluding the federal black lung program and are from Price (1987). Competitive state funds were authorized in 1983 in Minnesota and in 1985 in Hawaii, but the Hawaiian fund is not in operation.

4. More information on the insurance arrangements in workers' compensation is included in Burton and Krueger (1986).

5. This section is adapted from material at pages 33-35 of the National Commission *Report* (1972).

6. The relative contributions of work-related and nonwork-related causes may be relevant if the case qualifies for partial payment of the benefits from the second injury fund. Under stipulated statutory conditions that vary from state to state, these funds will pay for a portion of the workers' compensation benefits when the injury or disease experienced by the worker interacts with impairments that existed prior to the worker's current employment. See Larson and Burton (1985).

7. Although the National Commission supported a benefit formula that replaces 66 2/3 percent of the worker's gross weekly wage, the formula preferred by the Commission makes total disability benefits at least 80 percent of spendable earnings (National Commission 1972, pp. 60, 64). Spendable earnings are gross earnings minus deductions for the social security payroll tax and the federal income tax. Variants of the spendable earning approach are used in the Alaska, District of Columbia, Iowa and Michigan workers' compensation programs.

8. The National Commission also recommended that permanent total benefits be increased through time in the same proportion as increases in the state's average weekly wage. Similar protection for permanent partial disability would require permanent partial disability benefits to be escalated through time, reflecting the increase in the worker's earnings (or earning capacity) that would have occurred if he had not been affected by a work-related injury or disease. This definition of adequacy requires permanent partial disability benefits to replace 66 2/3 percent of the area between BC and FG after the date of MMI (graph 2.1).

9. One difficulty in establishing the appropriate amount for impairment benefits is the lack of an objective measure of the nonwork disability that results from the impairment. The standard for disability benefits is the worker's loss of earnings, which can be measured (although with some difficulty). An equivalent standard for impairment benefits is lacking since the disutility associated with nonwork disability cannot be directly measured.

10. The National Commission's definition of *equitable* implies that vertical equity requires a strict proportionality of benefits to losses. That is, a worker with twice the losses of another worker should receive exactly twice the benefits. More generally, vertical equity only requires that there be a consistent relationship between losses and benefits. Society may decide, for example, that the proportion of benefits to losses should decrease (or increase) as losses increase. The desired

relationship between benefits and losses may be nonlinear, which is consistent with the use of minimum and maximum benefits. Evaluation of workers' compensation benefits becomes much more complicated when the test for vertical equity is something other than strict proportionality between losses and benefits. Nonetheless, even the National Commission did not strictly adhere to its own definition of equitable (because the *Report* at p. 38 concluded "there is an uneasy case for maximum and minimum benefits"), and part IV of this report will consider the implications of using a more general test of vertical equity when the performance of workers' compensation programs is evaluated.

11. In order to provide permanent partial benefits that are reasonable and equitable—e.g., benefits that vary among workers reasonably with respect to their varying work disability—a certain amount of supervision by the workers' compensation agency is necessary. Cutting administrative costs by reducing the agency budget will, after a certain point, jeopardize the supervisory role and reduce equity.

12. A move from policy option 1 to policy option 4 increases both panoramic and myopic efficiency, as those terms are defined in the text.

Part II
The Ten-State Study of Workers' Compensation Procedures and Standards

Chapter 3
An Introduction to the Ten-State Study

The previous chapters provided a general introduction to workers' compensation and to permanent disability benefits. In this part of the study, we provide a detailed examination of the procedures and standards used to provide compensation for permanent disabilities in 10 jurisdictions.

An Overview of Permanent Disability Cases

The national experience with permanent disability cases in recent decades provides a useful backdrop for our intensive examination of the experience in 10 jurisdictions. The best data on permanent disability cases are available from the National Council on Compensation Insurance (NCCI), the organization that helps establish workers' compensation insurance rates in most states.

The NCCI data are collected for use in the rate-making procedure for workers' compensation insurance and bear the imprint of that use. The data are national only to the extent that they are provided by private insurance carriers and some competitive state funds. Excluded entirely from the data are six states with exclusive state funds, plus the experience of self-insuring employers and of some competitive state funds. Despite these exclusions, the data encompass most benefit payments in the United States and represent the most comprehensive available national and state information on benefits broken down by type of case.

The NCCI data used in this chapter are based on reports on the experience of carriers with insurance policies sold during particular policy years. Because of the time lag between the issuance of the policies for a given policy year and the compilation of the statistical reports pertaining to that year, the most recent data as of the writing of this study (summer 1986) are for policies written in 1982.[1]

The data collected by the NCCI distinguish among five types of cases with indemnity (cash) benefits: death, temporary total, and, of particular

interest to us, permanent total, permanent partial major, and permanent partial minor. The distinction between permanent partial major and permanent partial minor relates to the seriousness of the injury. The procedure used to distinguish between major and minor has changed through time.[2] Currently, permanent partial disability cases are classified as major or minor depending on the amount of cash benefits paid in the case, with the critical values varying by state.[3] Comparisons through time and among jurisdictions of the proportion of cases classified as major or minor permanent partial must be used with caution, but the data provide a rough guide to the distribution of such cases.

Table 3.1 shows the number of permanent disability cases for selected years since 1958. Permanent total cases have never totalled as many as 2,000 cases per year, and have represented from 0.10 percent to 0.16 percent of all cases. Their relative lack of frequency helps explain why the main focus of this study is on permanent partial disability benefits.

There were 20,994 major permanent partial disability cases in 1958, which was about 3 percent of all cases. By 1982, the number of major permanent partial disability cases had increased to 82,687, about 6.5 percent of all cases. Minor permanent partial disability cases have always been the most common type among permanent disability cases, although the absolute number in 1982 of 217,736 only represented about 17 percent of all cases, down from about 24 percent of all cases in 1968.

The combined total of all permanent disability cases (consisting almost entirely of permanent partial disability cases) was 188,653 in 1958, representing 26 percent of all cases. The percent of cases accounted for by permanent disability peaked in 1968 at almost 29 percent, and then declined to about 24 percent of all cases in 1978 and 1982. In short, there is evidence that permanent disability cases have become numerically less prevalent than other cases (almost all of which are temporary total disability).

Although the number of permanent disability cases has been declining relatively in recent decades, the average costs of such cases have been increasing in both absolute and (at least through 1978) relative senses (see table 3.2). In 1958, the national average cost of indemnity benefits for permanent total cases was $19,322, which represented 6,490 percent of the average cost of a temporary total case ($298) that year. By 1978, permanent total cases cost on average $78,788, which was 8,602 percent of the average cost of a temporary total case ($916) that year. Between 1978 and 1982, the average cost of a permanent total

Table 3.1
Number of Permanent Disability Cases, U.S. Totals,[1] 1958-82

Year	Type of Cases				
	Permanent total	Major permanent partial	Minor permanent partial	All permanent disability	All with indemnity benefits
1958[2]					
Number	808	20,994	166,851	188,653	715,999
Share of all cases (%)[3]	0.11	2.93	23.30	26.35	100.00
1968[2]					
Number	919	39,207	217,854	257,980	895,847
Share of all cases (%)[3]	0.10	4.38	24.32	28.80	100.00
1973[2]					
Number	1,692	42,114	213,228	257,034	1,030,740
Share of all cases (%)[3]	0.16	4.09	20.69	24.94	100.00
1978[2]					
Number	1,876	71,576	259,945	333,397	1,392,192
Share of all cases (%)[3]	0.13	5.14	18.67	23.95	100.00
1982[2]					
Number	1,869	82,687	217,736	302,292	1,259,770
Share of all cases (%)[3]	0.15	6.56	17.28	24.00	100.00

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," exhibits dated: for 1958, no date; for 1968, March 15, 1972; for 1973, July 1976; for 1978, April 1982; and for 1982, June 1986.

1. U.S. refers to the states that provide data to the National Council on Compensation Insurance, and thus excludes Nevada, North Dakota, Ohio, Washington, West Virginia, and Wyoming. California no longer provides certain data to the National Council, and so California 1981 policy year data are used for the columns pertaining to 1982. The 1982 data thus pertain to 44 states plus the District of Columbia. For these 45 jurisdictions, the data encompass the experience of private insurance carriers and some competitive state funds; excluded are data for self-insuring employers and some competitive state funds.

2. The data shown are for the insurance industry policy years that most closely correspond to the calendar years shown. For Pennsylvania, e.g., the 1982 data are for insurance policies in effect between April 1982 and March 1983.

3. The share is the number of the type of cases shown as a percentage of all cases paying indemnity (cash) benefits. Types of indemnity cases not shown individually are death and temporary total disability.

case increased in dollars to $92,055, but declined relative to the average cost of a temporary total case to 7,293 percent. Major permanent partial disability costs went from an average of $6,879 in 1958 to $21,456 in 1978, both figures roughly 2,300 percent of the average cost of temporary total cases in the corresponding years. In 1982, the major permanent partial cases had an average cost of $25,139, almost 2,000 percent of the cost of a temporary total case. Minor permanent partial disability costs averaged $1,253 in 1958 and $4,013 in 1978, both about 430 percent of the average cost of temporary total cases in those years. The minor permanent partial cases had an average cost of $4,953 in 1982, about 390 percent of the average cost of a temporary total case. The weighted average of all permanent disability cases went from $1,957 in 1958 to $8,178 in 1978 to $11,013 in 1982, increasing the relative costs compared to temporary total cases from 657 percent to 893 percent followed by a modest decline to 872 percent. This substantial escalation in relative costs between 1958 and 1982 reflects, in part, the increasing proportion of permanent disability cases accounted for by major permanent partial disability cases (see table 3.1), which are considerably more expensive than minor permanent partial disability cases.

The total costs of permanent disability cases, shown in table 3.3, reflect the developments in the numbers of such cases and their average costs as shown in the previous two tables. The share of all benefit payments represented by payments for permanent total cases increased from 2.64 percent to 3.54 percent between 1958 and 1982. Major permanent partial disability cases increased their share of all benefit payments from 24 percent to almost 43 percent, primarily because of the increasing share of all cases accounted for by these serious injuries. In contrast, minor permanent partial disability cases' share of all costs dropped from 35 percent to 22 percent, due to the numerical decline of such cases compared to other cases. Overall, the 24-year period saw permanent disability cases increase their share of all benefit payments from 62 percent to 68 percent, while the dollar amounts for permanent disability cases increased from $369 million to $3,329 million.

Two additional observations are warranted. Since 1968, the approximately two-thirds share of all cash benefits accounted for by permanent disability cases has been quite stable. Also, the notion sometimes advanced that too much of workers' compensation resources are dissipated on minor permanent partial disability cases seems increasingly less accurate, since the share of all benefits going to such cases has declined in each successive subperiod shown in table 3.3. This obser-

Table 3.2
Average Costs of Permanent Disability Cases, U.S. Averages,[1] 1958-82

Year	Type of Cases				
	Permanent total	Major permanent partial	Minor permanent partial	All permanent disability	Temporary total
1958[2]					
Cost (dollars)[3]	19,322	6,879	1,253	1,957	298
Cost relative to temporary total (%)	6,490	2,310	421	657	100
1968[2]					
Cost (dollars)[3]	35,606	9,983	2,055	3,379	434
Cost relative to temporary total (%)	8,207	2,301	474	779	100
1973[2]					
Cost (dollars)[3]	37,544	13,265	2,627	4,599	560
Cost relative to temporary total (%)	6,704	2,369	469	821	100
1978[2]					
Cost (dollars)[3]	78,788	21,456	4,013	8,178	916
Cost relative to temporary total (%)	8,602	2,342	438	893	100
1982[2]					
Cost (dollars)[3]	92,055	25,139	4,953	11,013	1,262
Cost relative to temporary total (%)	7,293	1,992	392	872	100

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," exhibits dated: for 1958, no date; for 1968, March 15, 1972; for 1973, July 1976; for 1978, April 1982; and for 1982, June 1986.

1. U.S. refers to the states that provide data to the National Council on Compensation Insurance, and thus excludes Nevada, North Dakota, Ohio, Washington, West Virginia, and Wyoming. California no longer provides certain data to the National Council, and so California 1981 policy year data are used for the columns pertaining to 1982. The 1982 data thus pertain to 44 states plus the District of Columbia. For these 45 jurisdictions, the data encompass the experience of private insurance carriers and some competitive state funds; excluded are data for self-insuring employers and some competitive state funds.

2. The data shown are for the insurance industry policy years that most closely correspond to the calendar years shown. For Pennsylvania, e.g., the 1982 data are for insurance policies in effect between April 1982 and March 1983.

3. The cost is the average cost of indemnity (cash) benefits for the type of cases shown. The cost of medical benefits is excluded.

Table 3.3
Total Costs of Permanent Disability Cases, U.S. Totals,[1] 1958-82

Year	Type of Cases				
	Permanent total	Major permanent partial	Minor permanent partial	All permanent disability	All with indemnity benefits
1958[2]					
Cost ($ millions)[3]	15.612	144.418	209.103	369.133	590.709
Share of all costs (%)[4]	2.64	24.45	35.40	62.49	100.00
1968[2]					
Cost ($ millions)[3]	32.722	391.384	447.578	871.684	1,286.793
Share of all costs (%)[4]	2.54	30.42	34.78	67.74	100.00
1973[2]					
Cost ($ millions)[3]	63.524	558.630	560.246	1,182.400	1,786.198
Share of all costs (%)[4]	3.56	31.27	31.37	66.20	100.00
1978[2]					
Cost ($ millions)[3]	147.807	1,535.737	1,043.063	2,726.607	4,042.086
Share of all costs (%)[4]	3.66	37.99	25.81	67.46	100.00
1982[2]					
Cost ($ millions)[3]	172.051	2,078.689	1,078.366	3,329.107	4,860.672
Share of all costs (%)[4]	3.54	42.77	22.19	68.49	100.00

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," exhibits dated: for 1958, no date; for 1968, March 15, 1972; for 1973, July 1976; for 1978, April 1982; and for 1982, June 1986.

1. U.S. refers to the states that provide data to the National Council on Compensation Insurance, and thus excludes Nevada, North Dakota, Ohio, Washington, West Virginia, and Wyoming. California no longer provides certain data to the National Council, and so California 1981 policy year data are used for the columns pertaining to 1982. The 1982 data thus pertain to 44 states plus the District of Columbia. For these 45 jurisdictions, the data encompass the experience of private insurance carriers and some competitive state funds; excluded are data for self-insuring employers and some competitive state funds.

2. The data shown are for the insurance industry policy years that most closely correspond to the calendar years shown. For Pennsylvania, e.g., the 1982 data are for insurance policies in effect between April 1982 and March 1983.

3. The cost is the total cost of indemnity (cash) benefits for the type of cases shown. The cost of medical benefits is excluded.

4. The share is the total cost of indemnity benefits for the type of cases shown as a percentage of all indemnity benefits. Types of indemnity cases not shown individually are death and temporary total disability.

vation must be used with caution, however, since the dividing line between major and minor permanent partial disability cases is somewhat arbitrary, and the trend showing relatively less importance for the minor category may in part be a statistical artifact.[4] Most of our analysis in this report relies on the total costs of all permanent disability cases in various states, a statistic that is not affected by the division between the major and minor permanent partial disability categories.

Limitations in the data shown in tables 3.1 to 3.3 make some qualification necessary. One limitation is that the information is all derived from the first reports from insurance carriers on the policies written in the given policy years. The first report is submitted 18 months after the policy begins, and obviously only covers developments in cases to that point, although reserves for expected future payments in the cases are recorded. Subsequent developments in these cases or for new cases that can be traced back to the particular policy year are reported on an annual basis thereafter.[5] Between the first and subsequent reports, some cases that were initially classified as minor permanent partial disability or temporary total are reclassified as major permanent partial disability or permanent total.[6] In some cases that are not reclassified as to type, the amount of benefits paid or reserved for future payments is increased. The result is that between the first and subsequent reports, typically the number of permanent disability cases increases, while the average costs for these cases also increase, both in dollars and relative to the costs of temporary total disability cases.

Table 3.4 shows changes in 1982 permanent disability cases between the actual first report on these cases and the simulated ultimate report basis.[7] Several results are apparent. The most dramatic change involves permanent total cases, for which the number almost doubled and total costs more than doubled. Indeed, permanent total cases on the ultimate report basis account for more than 7 percent of all cash benefit payments.

Major permanent partial disability cases also show a marked increase in numbers and costs, accounting for almost 52 percent of all benefit payments on the ultimate report basis. Permanent partial disability minor cases, in contrast, show almost no increase in absolute numbers between the first and ultimate report basis, in part because some of these cases are transformed into permanent total or major permanent partial disability cases. As a result, permanent partial disability minor cases account for about 16 percent of all costs in the ultimate report, down from about 22 percent on the first report basis.

Table 3.4
Permanent Disability Cases, 1982
Comparisons of First Report Basis and Ultimate Report Basis

Type of cases and report basis	Number of cases	Share of all cases (percentage)	Average cost[1] (dollars)	Cost relative to temporary total (percentage)	Total costs[2] ($ millions)	Share of all costs (percentage)
Permanent total						
First report	1,869	0.15	92,055	7,293	172.051	3.54
Ultimate report	3,640	0.28	137,021	9,881	498.756	7.07
Major permanent partial						
First report	82,687	6.56	25,139	1,992	2,078.689	42.77
Ultimate report	99,855	7.66	36,638	2,642	3,658.445	51.85
Minor permanent partial						
First report	217,736	17.28	4,953	392	1,078.366	22.19
Ultimate report	218.853	16.78	5,210	376	1,140.291	16.16
All permanent disability						
First report	302,292	24.00	11,013	872	3,329.107	68.49
Ultimate report	322,348	24.72	16,434	1,185	5,297.493	75.08

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Competitive State Funds—1st Report Basis," and similar exhibit on "Ultimate Report Basis," both June 1986. California data from the 1981 policy year were added since California did not provide the 1982 policy year data to the National Council on Compensation Insurance.

1. The cost is the average cost of indemnity (cash) benefits for the type of cases shown.

2. The cost is the total cost of indemnity (cash) benefits for the type of cases shown.

The overall significance of permanent disability cases is magnified by moving from the first to ultimate report basis. They are more numerous, more expensive on average, and account for 75 percent of all cash benefits, more than 6 percentage points higher than on the first report basis.

Although the data on an ultimate report basis provide a more accurate picture of the number and cost of permanent disability cases, the balance of this report will focus on first report data for two reasons. First, the National Council on Compensation Insurance only began to develop the countrywide exhibits on a simulated fifth report basis in 1979 and on the simulated ultimate report basis in 1984, and therefore data on an historical basis comparable to those shown in table 3.4 are unavailable. Second, the procedures used to develop the simulated ultimate report basis from the first report data are not comparable among all states. In particular, the development procedures for three of the states examined intensively in this report—California, New Jersey, and New York—are inconsistent with those used for the other states for which the NCCI provides data.[8]

Another limitation to the data provided in tables 3.1 to 3.3 that affects the previous observations is that the information pertains to national experience and thus masks significant differences in developments in permanent disability benefits at the state level. Table 3.5 provides an introduction to the diversity that underlies the national averages. In 1982, for example, the percentage of benefit costs accounted for by permanent total cases ranged from zero percent in South Dakota to 13.10 percent in Hawaii. For major permanent partial disability cases, the range was from 5.39 percent in Missouri to 79.63 percent in Rhode Island. For minor permanent partial disability cases, the percentages varied from 3.01 percent in Rhode Island to 49.10 in New Jersey. The percentages for particular types of permanent disability benefits were partially offsetting (as in Rhode Island), but the share of all costs accounted for by all types of permanent disability benefits ranged from 40.59 percent in Arizona to 84.21 percent in Rhode Island, each a considerable distance from the U.S. average of 68.49 percent. A major purpose of this study is to explain some of the reasons for this diversity.

The Selection of Ten States

Each state controls its workers' compensation program, and there are substantial differences among jurisdictions in the criteria and procedures

Table 3.5
Costs of Permanent Disability Cases, by Jurisdiction, 1982

Jurisdiction	Permanent total		Major permanent partial		Minor permanent partial		All permanent disability	
	Cost[1] ($ millions)	Share of all costs[2] (percentage)	Cost[1] ($ millions)	Share of all costs[2] (percentage)	Cost[1] ($ millions)	Share of all costs[2] (percentage)	Cost[1] ($ millions)	Share of all costs[2] (percentage)
Alabama	1.386	3.13	19.244	43.46	8.213	18.55	28.843	65.13
Alaska	3.029	9.18	16.688	50.59	5.599	16.97	25.317	76.75
Arizona	1.197	2.05	17.794	30.43	4.744	8.11	23.735	40.59
Arkansas	0.819	2.13	21.153	55.10	5.488	14.30	27.461	71.53
California	17.782	2.79	289.126	45.29	217.269	34.03	524.177	82.11
Colorado	3.000	2.47	75.859	62.35	16.820	13.83	95.678	78.64
Connecticut	1.114	1.24	44.001	49.18	17.017	19.02	62.132	69.45
Delaware	0.495	5.22	3.203	33.77	1.822	19.21	5.520	58.21
District of Columbia	1.937	7.17	17.761	65.70	1.162	4.30	20.860	77.16
Florida	7.491	4.88	75.223	49.03	14.277	9.31	96.991	63.22
Georgia	3.434	4.01	48.362	56.43	11.934	13.92	63.730	74.36
Hawaii	5.260	13.10	20.028	49.89	7.335	18.27	32.623	81.26
Idaho	0.497	2.23	5.498	24.74	8.383	37.73	14.378	64.71
Illinois	6.770	2.04	173.783	52.43	68.475	20.66	249.028	75.12
Indiana	0.539	1.26	16.185	37.75	7.203	16.80	23.928	55.81
Iowa	1.589	2.59	29.594	48.23	9.189	14.98	40.372	65.80
Kansas	1.693	2.83	34.790	58.25	8.600	14.40	45.083	75.48
Kentucky	2.895	5.20	34.551	62.01	3.768	6.76	41.214	73.97
Louisiana	10.273	6.76	96.528	63.55	14.324	9.43	121.125	79.74
Maine	3.237	5.97	30.258	55.82	7.653	14.12	41.147	75.91
Maryland	2.889	3.31	32.229	36.93	28.642	32.82	63.760	73.07

Massachusetts	3.821	1.69	112.111	49.56	14.919	6.60	130.851	57.84
Michigan	3.952	2.54	84.690	54.37	18.444	11.84	107.086	68.75
Minnesota	1.987	1.81	56.082	51.01	18.069	16.44	76.139	69.26
Mississippi	0.448	1.54	16.389	56.29	3.414	11.73	20.251	69.56
Missouri	3.256	3.88	4.528	5.39	34.400	40.98	42.184	50.25
Montana	1.073	2.94	22.969	62.97	1.485	4.07	25.527	69.99
Nebraska	0.875	3.81	10.543	45.91	3.883	16.91	15.301	66.63
New Hampshire	1.689	5.59	18.564	61.42	1.256	4.15	21.509	71.16
New Jersey	4.847	2.75	45.007	25.58	86.391	49.10	136.245	77.44
New Mexico	1.003	2.26	25.379	57.20	7.753	17.47	34.134	76.93
New York	2.735	0.98	102.792	36.71	51.122	18.26	156.649	55.95
North Carolina	1.567	2.38	25.948	39.35	15.424	23.39	42.940	65.11
Oklahoma	4.979	3.68	54.246	40.08	37.700	27.85	96.925	71.61
Oregon	1.260	1.65	8.274	10.84	37.455	49.05	46.990	61.54
Pennsylvania	31.172	11.27	61.210	22.12	50.506	18.25	142.888	51.64
Rhode Island	0.598	1.56	30.519	79.63	1.154	3.01	32.271	84.21
South Carolina	0.791	1.72	23.767	51.64	9.239	20.07	33.798	73.43
South Dakota	0.000	0.00	2.873	38.21	1.551	20.62	4.424	58.83
Tennessee	1.387	2.06	34.697	51.48	11.779	17.48	47.863	71.01
Texas	22.384	3.97	157.629	27.94	171.603	30.42	351.616	62.33
Utah	0.244	2.11	6.946	59.93	1.136	9.80	8.326	71.84
Vermont	0.039	0.31	5.477	43.45	1.863	14.78	7.379	58.55
Virginia	1.863	2.74	31.543	46.47	9.971	14.69	43.377	63.91
Wisconsin	2.751	3.07	34.652	38.64	19.929	22.22	57.332	63.92
Total	172.051	3.54	2,078.689	42.77	1,078.366	22.19	3,329.107	68.49

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," exhibits dated June 1986.

1. The cost is the total cost of indemnity (cash) benefits for the type of cases shown. The cost of medical benefits is excluded.

2. The share is the total cost of indemnity benefits for the type of cases shown as a percentage of all indemnity benefits. Types of indemnity cases not shown individually are death and temporary total disability.

used to compensate permanent disabilities. The data in table 3.5 provide some evidence on the extent of this diversity, although even some states that devote similar percentages of benefits to permanent disability cases may reach the parity by different routes.

This study provides an examination of the approaches to permanent disability benefits used in 10 jurisdictions. It was not feasible to examine a larger number because the paucity of information on criteria and procedures made extensive field work, reviews of published and unpublished documents, interviews, and analyses of court decisions necessary.

The 10 jurisdictions were selected at the beginning of a research project sponsored by the National Science Foundation (NSF) that commenced in 1974. An advisory committee composed of academics and practitioners familiar with workers' compensation aided in the selection. The field work took place in 1975-76 in most jurisdictions, and following completion of an intensive statistical analysis of data from three states (California, Florida, and Wisconsin), a final report was submitted to the NSF in 1979 (Berkowitz, Burton, and Vroman). The information on the 10 jurisdictions was updated by correspondence and interviews between 1982 and 1985.

Among the factors considered when we chose the jurisdictions for our study were: the relative emphasis placed on impairment, as opposed to disability, as a basis for benefits; the administration procedures used to assess the extent of impairment and disability; the relative importance of litigation in determining the amounts of benefits; the comparative level of benefits; the attention devoted to rehabilitation by the state workers' compensation agency; and the relative importance of self-insurance, private insurance carriers, and state insurance funds.

Three states—California, Florida, and Wisconsin—were chosen partly because they were included in the "wage-loss study" summarized in part III of this volume, but also partly because of their distinctive attributes. California is the most populous state, and it uses a unique comprehensive schedule for rating the extent of permanent partial disability. Before 1979, when our original field work was completed, Florida had an unusual procedure that allowed workers to choose whether their permanent injuries would be rated on the basis of impairment or on the basis of disability. Since 1979, Florida has achieved fame or notoriety because of the adoption of the wage-loss approach to permanent partial

disability benefits. As for Wisconsin, its workers' compensation program is widely regarded as among the best-administered in the country.

To supplement these three states, New Jersey was an obvious candidate. One of the authors (Berkowitz) had done previous work in the state, which is widely know for its practice of evaluating permanent partial disabilities on the whole man theory. New York was included for several reasons. Not only is it the second largest state and the only one with a hearing system that mandates an inquiry in each case before closure, but it also has a unique combination of approaches to permanent disability benefits. We included the District of Columbia not only because it measures loss of wage-earning capacity in the nonscheduled permanent partial cases, but because when we began this study, it was a federal jurisdiction operating under provisions of the Longshoremen and Harbor Workers' Act. Subsequently the program has been taken over by the local government.

Nevada and Ohio were included in part because we wanted to describe and analyze their experience with exclusive state funds. Another reason for Nevada's inclusion was the 1972 amendment to its law that mandated the use of the American Medical Association's *Guides for the Evaluation of Permanent Impairment.* Ohio was interesting not only because it was an exclusive fund state, but also because it was the only state besides Florida to use a choice of procedures approach for nonscheduled cases. Michigan and Pennsylvania were chosen because we thought they represented wage-loss states. We were particularly interested to learn why Michigan made more prominent use of redemption settlements (compromise and release agreements) than did Pennsylvania.

The initial reasons for selection of the 10 jurisdictions have in some cases been rendered moot by subsequent changes in state laws. Nonetheless, as we will indicate, the changes themselves in jurisdictions such as Florida, New Jersey, and Michigan have particular significance in understanding the continuing quest for an effective way to provide permanent disability benefits.

Historical Data for the Ten Jurisdictions

The historical data that follow, describing the numbers and costs of permanent disability cases in the jurisdictions included in this study, are based on National Council on Compensation Insurance information, and are therefore consistent with the data in tables 3.1—3.5. Two

states in our 10-state study—Ohio and Nevada—are exclusive fund states for which the NCCI does not collect information, and therefore they are omitted from subsequent tables (as they were from earlier tables).

The shares of each state's indemnity cases accounted for by permanent total cases in 1958, 1968, 1973, 1978, and 1982 are shown in table 3.6. In 1958, the average proportion of all cases represented by permanent total cases across the 45 states for which the NCCI collects information was 0.1128 percent. Among the eight states considered here, the range in the percentage of all cases accounted for by permanent total cases was from 0.0406 percent in the District of Columbia to 0.1723 percent in Pennsylvania (36 percent and 153 percent of the U.S. average share, respectively); the eight-state average was 0.0935 percent, or only 83 percent of the U.S. average share.

Through time, the share of all cases accounted for by permanent total disability at the national level has varied in a fairly narrow range: roughly 0.10 percent to 0.16 percent. The eight-state average has fluctuated more widely, dropping from 1958 to 1968, then increasing to 1973 and again to 1978, and then dropping by 1982. In 1982, the eight-state average share (0.13 percent) was about 88 percent of the national average (0.1348 percent).

The relative importance of permanent total cases in the eight states has fluctuated considerably in some jurisdictions. In Michigan, for example, the share was 137 percent of the national average in 1958; down to 53 percent in 1968; then, by 1978, up to fully 331 percent; only to drop again to 130 percent in 1982. In Wisconsin, the figure was 51 percent in 1958, but had wound down to 29 percent by 1982. As of 1982, only Michigan and Pennsylvania had permanent total shares that were more than 20 percent above the national average share for permanent total cases; California, New Jersey, New York, and Wisconsin had shares more than 20 percent below the national average; the District of Columbia and Florida were within 20 percent of the national average.

The shares of each state's indemnity cases accounted for by major permanent partial disability cases are presented in table 3.7. As previously reported (table 3.2), the major cases share at the national level increased from 2.93 percent in 1958 to 6.56 percent in 1982. The national experience has been closely tracked by the eight-state average, which has consistently been within about 10 percent of the national figure.

Table 3.6
Number of Permanent Total Disability Cases as a Share of All Cases, 1958-82, in Eight States

Jurisdiction(s)	1958[1]		1968[1]		1973[1]		1978[1]		1982[1]	
	Share of all cases[2] (%)	Share in state as % of U.S. share	Share of all cases[2] (%)	Share in state as % of U.S. share	Share of all cases[2] (%)	Share in state as % of U.S. share	Share of all cases[2] (%)	Share in state as % of U.S. share	Share of all cases[2] (%)	Share in state as % of U.S. share
U.S. average	.1128		.1026		.1641		.1348		.1484	
Eight-state average	.0935	82.85	.0685	66.77	.1079	65.73	.1342	99.62	.1300	87.62
California	.0666	59.02	.0883	86.12	.0796	48.47	.0430	31.93	.0428	28.82
District of Columbia	.0406	36.00	.0227	22.12	.1543	93.99	.1217	90.33	.1492	100.58
Florida	.0820	72.67	.0742	72.35	.1253	76.33	.1161	86.17	.1582	106.63
Michigan	.1546	137.01	.0547	53.31	.2511	152.99	.4455	330.62	.1926	129.79
New Jersey	.0793	70.28	.0517	50.37	.0944	57.50	.1422	105.52	.0938	63.19
New York	.0895	79.32	.0285	27.83	.0542	33.04	.0825	61.19	.0506	34.11
Pennsylvania	.1723	152.64	.1540	150.16	.2293	139.69	.3518	261.05	.3100	208.92
Wisconsin	.0574	50.88	.0404	39.36	.0624	38.02	.0174	12.95	.0430	28.96

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," exhibits dated: for 1958, no date; for 1968, March 15, 1972; for 1973, July 1976; for 1978, April 1982; and for 1982, June 1986.

1. The data shown are for the insurance industry policy years that most closely correspond to the calendar years shown. For Pennsylvania, e.g., the 1982 data are for insurance policies in effect between April 1982 and March 1983.

2. The share is the number of permanent total disability cases as a percentage of all cases paying indemnity (cash) benefits in the state.

Table 3.7
Number of Major Permanent Partial Disability Cases as a Share of All Cases, 1958-82, in Eight States

Jurisdiction(s)	1958[1]		1968[1]		1973[1]		1978[1]		1982[1]	
	Share of all cases[2] (%)	Share in state as % of U.S. share	Share of all cases[2] (%)	Share in state as % of U.S. share	Share of all cases[2] (%)	Share in state as % of U.S. share	Share of all cases[2] (%)	Share in state as % of U.S. share	Share of all cases[2] (%)	Share in state as % of U.S. share
U.S. average	2.93		4.38		4.09		5.14		6.56	
Eight-state average	2.70	92.16	4.29	98.01	4.53	110.79	5.40	105.05	5.86	89.30
California	4.18	142.74	6.98	159.48	7.76	189.82	7.12	138.46	8.01	122.11
District of Columbia	2.23	76.20	3.43	78.29	8.92	218.26	13.75	267.52	12.06	183.76
Florida	1.91	65.00	3.28	75.04	3.84	94.04	6.71	130.58	5.03	76.63
Michigan	2.50	85.20	4.96	133.35	4.10	100.24	7.04	136.93	7.17	109.27
New Jersey	1.83	62.36	2.77	63.30	3.20	78.37	4.24	82.42	4.20	64.02
New York	2.34	79.88	2.17	49.62	2.82	68.98	4.36	84.90	5.86	89.26
Pennsylvania	3.46	117.87	4.82	110.15	1.89	46.30	1.47	27.58	1.40	21.26
Wisconsin	0.96	32.58	2.11	48.23	1.36	33.18	2.14	41.57	3.15	48.05

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," exhibits dated: for 1958, no date; for 1968, March 15, 1972; for 1973, July 1976; for 1978, April 1982; and for 1982, June 1986.

1. The data shown are for the insurance industry policy years that most closely correspond to the calendar years shown. For Pennsylvania, e.g., the 1982 data are for insurance policies in effect between April 1982 and March 1983.

2. The share is the number of major permanent partial disability cases as a percentage of all cases paying indemnity (cash) benefits in the state.

The share of all cases accounted for by major permanent partial disability cases has varied considerably through time in some jurisdictions, however. In the District of Columbia, the share was only 76 percent of the national average in 1958, but it soared to 268 percent of the national average by 1978 and was still 184 percent of the national average in 1982. The Florida share increased from 65 percent to 131 percent of the national average between 1958 and 1978, but slid to 77 percent in 1982. As of 1982, the share of all cases going to major permanent partial disability was within 20 percent of the national average only in Michigan and New York. States with shares at least 20 percent above the national average were California and the District of Columbia. At the other extreme were Pennsylvania and Wisconsin, with shares at least 50 percent below the national average share.

Table 3.8 provides the shares of all cases accounted for by minor permanent partial disability cases. Nationally, the share increased from 1958 to 1968 and thereafter declined, and this general pattern was matched in the eight states on average, with the eight-state share consistently within 10-20 percent of the national average share.

In contrast to permanent total and major permanent partial disability cases, the experience of individual states with the shares of all cases going to minor permanent partial disability has not varied dramatically through time. Only Florida had a swing in its share relative to the U.S. share in excess of 40 percent over the 1958 to 1982 period (up from 45 percent of the national average to 89 percent by 1978, and then back to 43 percent). The other states have had relatively stable shares over that period. New Jersey has consistently had a share of minor permanent partial disability cases in excess of 230 percent of the national average; California and New York have consistently been within about 30 percent of the national average; and the District of Columbia, Michigan, Pennsylvania, and Wisconsin have always been at least 30 percent below the national average.

The share of all indemnity cases accounted for by all types of permanent disability cases (permanent total, major permanent partial, and minor permanent partial) is provided in table 3.9. As previously noted (table 3.1), all permanent disability cases accounted for 26 percent of all indemnity cases in 1958. That share increased to almost 29 percent in 1968, then declined to 25 percent in 1973 and 24 percent in 1978 and 1982. This pattern was closely tracked in the eight states on average: their share consistently ran about 10-15 percent above the national

Table 3.8
Number of Minor Permanent Partial Disability Cases as a Share of All Cases, 1958-82, in Eight States

Jurisdiction(s)	1958[1]		1968[1]		1973[1]		1978[1]		1982[1]	
	Share of all cases[2] (%)	Share in state as % of U.S. share	Share of all cases[2] (%)	Share in state as % of U.S. share	Share of all cases[2] (%)	Share in state as % of U.S. share	Share of all cases[2] (%)	Share in state as % of U.S. share	Share of all cases[2] (%)	Share in state as % of U.S. share
U.S. average	23.20		24.32		20.69		18.67		17.28	
Eight-state average	25.82	110.81	27.74	114.05	24.74	119.56	21.16	113.31	16.19	93.68
California	22.35	95.92	30.53	125.56	27.11	131.01	21.42	114.73	21.89	126.67
District of Columbia	8.86	38.01	11.32	46.56	11.11	53.68	9.62	51.50	6.69	38.71
Florida	10.55	45.27	17.10	70.34	15.21	73.49	16.63	89.08	7.35	42.51
Michigan	6.58	28.25	11.53	47.40	13.48	65.13	9.60	51.42	10.27	59.40
New Jersey	67.08	287.85	58.48	240.48	49.89	241.10	49.84	266.95	40.98	237.12
New York	30.49	130.86	31.73	130.48	27.02	130.59	24.14	129.26	21.95	127.01
Pennsylvania	4.53	19.42	5.21	21.43	9.33	45.07	7.71	41.30	9.86	57.05
Wisconsin	12.13	52.04	12.50	51.39	10.86	52.48	9.34	50.04	10.54	60.97

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," exhibits dated: for 1958, no date; for 1968, March 15, 1972; for 1973, July 1976; for 1978, April 1982; and for 1982, June 1986.

1. The data shown are for the insurance industry policy years that most closely correspond to the calendar years shown. For Pennsylvania, e.g., the 1982 data are for insurance policies in effect between April 1982 and March 1983.

2. The share is the number of minor permanent partial disability cases as a percentage of all cases paying indemnity (cash) benefits in the state.

Table 3.9
Number of All Types of Permanent Disability Cases as a Share of All Cases, 1958-82, in Eight States

Jurisdiction(s)	1958[1]		1968[1]		1973[1]		1978[1]		1982[1]	
	Share of all cases[2] (%)	Share in state as % of U.S. share	Share of all cases[2] (%)	Share in state as % of U.S. share	Share of all cases[2] (%)	Share in state as % of U.S. share	Share of all cases[2] (%)	Share in state as % of U.S. share	Share of all cases[2] (%)	Share in state as % of U.S. share
U.S. average	26.35		28.80		24.94		23.95		24.00	
Eight-state average	28.62	108.61	32.09	111.45	29.37	117.77	26.69	111.46	22.18	92.44
California	26.61	100.98	37.60	130.58	34.94	140.10	28.58	119.36	29.95	124.82
District of Columbia	11.13	42.25	14.77	51.30	20.18	80.91	23.49	98.09	18.90	78.77
Florida	12.54	47.58	20.46	71.06	19.17	76.88	23.46	97.97	12.53	52.24
Michigan	9.24	35.06	16.54	57.44	17.82	71.46	17.09	71.35	17.63	73.48
New Jersey	68.99	261.82	61.30	212.88	53.18	213.24	54.22	226.43	45.28	188.70
New York	32.93	124.97	33.93	117.83	29.89	119.86	28.58	119.35	27.86	116.11
Pennsylvania	8.15	30.95	10.19	35.38	11.45	45.90	9.53	39.80	11.57	48.20
Wisconsin	13.14	49.87	14.65	50.86	12.28	49.23	11.50	48.02	13.74	57.24

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," exhibits dated: for 1958, no date; for 1968, March 15, 1972; for 1973, July 1976; for 1978, April 1982; and for 1982, June 1986.

1. The data shown are for the insurance industry policy years that most closely correspond to the calendar years shown. For Pennsylvania, e.g., the 1982 data are for insurance policies in effect between April 1982 and March 1983.

2. The share is the number of all types of permanent disability cases (permanent total, major permanent partial, and minor permanent partial) as a percentage of all cases paying indemnity (cash) benefits in the state.

average share from 1958 to 1978, and as of 1982 was about 8 percent below.

The eight states' movements in the three types of permanent disability cases as shown in tables 3.6 to 3.8 were partially offsetting. For example, in Pennsylvania the increased shares of permanent total and minor permanent partial disability cases were partially offset by a decrease in the share of major permanent partial disability cases. Nonetheless, the percentage of all cases accounted for by permanent disability cases changed dramatically in some states. The District of Columbia's share relative to the national average share increased from 42 percent in 1958 to 98 percent in 1978, and then fell to 79 percent in 1982; Florida's from 47 percent to 98 percent to 52 percent; Michigan's from 35 percent to 71 percent to 73 percent. New York and California began and ended the 20-year period with permanent disability cases accounting for shares within about 30 percent of the national average shares. New Jersey's permanent disability cases as a percentage of its total cases were always in excess of 180 percent of the national average, while the shares in Pennsylvania and Wisconsin were always less than 60 percent of the national average shares.

The average costs of the various types of permanent disability cases are analyzed in the next series of tables. Table 3.10 shows the average costs of permanent total cases in the U.S. and in the eight states in 1958, 1968, 1973, 1978, and 1982. In 1958, the national average was $19,322, compared to $24,107 (almost 25 percent more) in the eight states. The range among the eight states that year was from $17,526 in Michigan to $52,364 in Wisconsin (91 percent and 271 percent of the national average, respectively).

The average cost of permanent total cases increased nationally from $19,322 in 1958 to $92,055 in 1982. The average permanent total cost in the eight states increased more rapidly than the national average, so that by 1982 the eight-state average ($149,978) was about 163 percent of the national average.

The relative cost of permanent total cases varied widely within the eight jurisdictions between 1958 and 1982. Michigan had the lowest average cost in 1958 (91 percent of the national average) and the next to the lowest in 1982 (75 percent), but in 1968 its average cost was 164 percent of the national average, ranking it fourth among the eight jurisdictions that year. Wisconsin had the highest average cost in 1958 and in 1978 (271 percent and 180 percent of the national averages in

Table 3.10
Permanent Total Disability Cases in Eight States, 1958-82
Average Costs and Costs Relative to U.S. Averages

Jurisdiction(s)	1958[1] Cost[2] (dollars)	1958[1] Cost relative to U.S. cost (%)	1968[1] Cost[2] (dollars)	1968[1] Cost relative to U.S. cost (%)	1973[1] Cost[2] (dollars)	1973[1] Cost relative to U.S. cost (%)	1978[1] Cost[2] (dollars)	1978[1] Cost relative to U.S. cost (%)	1982[1] Cost[2] (dollars)	1982[1] Cost relative to U.S. cost (%)
U.S. average	19,322		35,606		37,544		78,788		92,055	
Eight-state average	24,107	124.77	53,084	149.09	56,759	151.181	94,738	120.24	149,978	162.92
California	31,420	162.61	63,673	178.83	67,525	179.86	139,745	177.37	199,803	217.05
District of Columbia	30,500	157.85	27,000	75.83	163,000	434.16	132,800	168.55	322,902	350.77
Florida	25,000	129.39	38,208	107.31	45,796	121.98	62,648	79.51	97,291	105.69
Michigan	17,526	90.71	58,238	163.56	36,988	98.52	43,686	55.68	69,339	75.32
New Jersey	32,500	168.20	66,464	186.67	63,396	168.86	87,944	111.62	107,704	117.00
New York	19,714	102.03	33,280	93.47	42,358	112.82	62,925	79.87	60,789	66.03
Pennsylvania	17,742	91.82	35,148	98.71	64,776	172.53	138,076	175.25	180,187	195.74
Wisconsin	52,364	271.01	88,364	248.17	47,333	126.08	141,667	179.81	161,812	175.78

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," exhibits dated: for 1958, no date; for 1968, March 15, 1972; for 1973, July 1976; for 1978, April 1982; and for 1982, June 1986.

1. The data shown are for the insurance industry policy years that most closely correspond to the calendar years shown. For Pennsylvania, e.g., the 1982 data are for insurance policies in effect between April 1982 and March 1983.

2. The cost is the average cost of indemnity (cash) benefits for permanent total disability cases in the state.

those years), but in 1982 ranked only fourth out of the eight jurisdictions. These fluctuations reflect in part the relatively small number of permanent total cases: a few cases can significantly affect a state's average costs. Nonetheless, a few stable patterns are evident. For example, in each of the five years, California and Wisconsin had permanent total costs at least 25 percent above the national average, while Florida and New York had costs within 35 percent of the national average.

The average costs of major permanent partial disability cases are shown in table 3.11. As previously discussed, the national average for this type of case increased from $6,879 in 1958 to $25,139 in 1982. The eight-state average also increased through time, but at a slower pace until recently. In 1958, the average cost of major permanent partial disability cases in the eight states was 119 percent of the national average; in 1968, 109 percent; in 1973, 103 percent; and in 1978, 90 percent. Then in 1982 the eight-state average cost shot up to 135 percent of the national average cost.

Major permanent partial disability costs declined relative to the national average during each of the subperiods shown in table 3.11 in three states: California, New York, and (with one exception) New Jersey. Pennsylvania was a clear exception to the pattern of declining relative costs. Pennsylvania's average major permanent partial disability costs were about 93 percent of the national average in 1958, then fell to 70 percent in 1968; but by 1982 they had soared to $78,575, more than 312 percent of the national average and far higher than in any of the other seven jurisdictions.

Table 3.12 presents the average costs of minor permanent partial disability cases. The national average increased from $1,253 to $4,953 between 1958 and 1982. The eight states on average were within 3 percent of the national average in 1958, 1968, 1973, and 1982; in 1978 their average minor permanent partial disability cost had declined to only 89 percent of the national average. In all but New Jersey and Pennsylvania, minor permanent disability cases were relatively less expensive (compared to the national average) in 1982 than in 1958. As with major permanent partial disability costs, Pennsylvania provided the most striking increase, beginning at 92 percent of the national average in 1958 and increasing through time until by 1982 its minor permanent partial disability costs were more than 185 percent of the national average. As of 1982, New York's minor permanent partial disability average

Table 3.11
Major Permanent Partial Disability Cases in Eight States, 1958-82
Average Costs and Costs Relative to U.S. Averages

Jurisdiction(s)	1958[1]		1968[1]		1973[1]		1978[1]		1982[1]	
	Cost[2] (dollars)	Cost relative to U.S. cost (%)	Cost[2] (dollars)	Cost relative to U.S. cost (%)	Cost[2] (dollars)	Cost relative to U.S. cost (%)	Cost[2] (dollars)	Cost relative to U.S. cost (%)	Cost[2] (dollars)	Cost relative to U.S. cost (%)
U.S. average	6,879		9,983		13,265		21,456		25,139	
Eight-state average	8,169	118.75	10,890	109.09	13,602	102.55	19,379	90.32	34,119	135.72
California	8,442	122.73	10,005	100.23	12,516	94.35	15,776	73.53	17,330	68.93
District of Columbia	10,900	158.45	11,987	120.08	17,242	129.99	38,266	178.34	36,620	145.67
Florida	5,491	79.82	9,692	97.09	12,070	90.99	19,276	89.84	30,728	122.23
Michigan	8,705	126.55	18,209	182.41	20,226	152.48	26,666	124.28	39,892	158.68
New Jersey	8,451	122.85	10,308	103.26	11,713	88.30	15,344	71.51	22,314	88.76
New York	8,897	129.34	12,368	123.90	14,337	108.08	18,534	86.38	19,730	78.48
Pennsylvania	6,413	93.23	6,956	69.68	20,062	151.24	54,904	255.89	78,575	312.56
Wisconsin	10,448	151.88	10,899	109.18	15,775	118.92	20,890	97.36	27,766	110.45

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," exhibits dated: for 1958, no date; for 1968, March 15, 1972; for 1973, July 1976; for 1978, April 1982; and for 1982, June 1986.

1. The data shown are for the insurance industry policy years that most closely correspond to the calendar years shown. For Pennsylvania, e.g., the 1982 data are for insurance policies in effect between April 1982 and March 1983.

2. The cost is the average cost of indemnity (cash) benefits for major permanent partial disability cases in the state.

Table 3.12
Minor Permanent Partial Disability Cases in Eight States, 1958-82
Average Costs and Costs Relative to U.S. Averages

Jurisdiction(s)	1958[1]		1968[1]		1973[1]		1978[1]		1982[1]	
	Cost[2] (dollars)	Cost relative to U.S. cost (%)	Cost[2] (dollars)	Cost relative to U.S. cost (%)	Cost[2] (dollars)	Cost relative to U.S. cost (%)	Cost[2] (dollars)	Cost relative to U.S. cost (%)	Cost[2] (dollars)	Cost relative to U.S. cost (%)
U.S. average	1,253		2,055		2,627		4,013		4,953	
Eight-state average	1,235	98.54	2,119	103.12	2,589	98.57	3,558	88.67	5,014	101.24
California	1,972	157.36	2,611	127.10	3,180	121.06	4,205	104.78	4,767	96.25
District of Columbia	2,083	166.18	2,459	119.68	3,353	127.64	4,496	112.05	4,318	87.19
Florida	1,486	118.57	2,399	116.77	2,763	105.20	3,703	92.27	3,992	80.61
Michigan	2,221	177.24	4,077	198.44	4,270	162.56	4,723	117.71	6,069	122.54
New Jersey	904	72.16	1,566	76.20	1,918	73.03	2,482	61.86	4,392	88.68
New York	1,044	80.10	1,722	83.83	1,819	69.24	2,351	58.58	2,619	52.87
Pennsylvania	1,156	92.24	2,038	99.21	3,648	138.86	7,843	195.46	9,176	185.28
Wisconsin	1,951	155.67	2,298	111.87	2,868	109.20	3,703	92.28	4,779	96.50

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," exhibits dated: for 1958, no date; for 1968, March 15, 1972; for 1973, July 1976; for 1978, April 1982; and for 1982, June 1986.

1. The data shown are for the insurance industry policy years that most closely correspond to the calendar years shown. For Pennsylvania, e.g., the 1982 data are for insurance policies in effect between April 1982 and March 1983.

2. The cost is the average cost of indemnity (cash) benefits for minor permanent partial disability cases in the state.

costs were more than 40 percent below the national average; Pennsylvania's were more than 85 percent above; and costs in the other five states were within 25 percent of the national average.

Table 3.13 provides the average cost for all types of permanent disability cases from 1958 to 1982. The increase in the national average during this period was from $1,957 to $11,013; these figures reflect the dominant number of minor permanent partial disability cases. The eight-state average cost for all permanent disability cases was within 4 percent of the national average in 1958, 1968, and 1973, declined to only 88 percent of the national average in 1978, and then soared to 133 percent of the national average in 1982.

Average permanent disability costs declined relative to the national average in each of the successive subperiods between 1958 and 1982 in California and New York. In Wisconsin, costs were lower in 1982 than in 1958, although between 1978 and 1982 costs did increase. In Michigan and New Jersey, costs increased between 1958 and 1968, then declined in 1973 and 1978, and finally increased between 1978 and 1982; in both states average costs relative to the national average were lower in 1982 than they were in 1958. In the District of Columbia (up from 202 percent of the national average in 1958 to 249 percent in 1982), Florida (up from 115 percent to 145 percent), and Pennsylvania (up from 191 percent in 1958 to 201 percent in 1982) the relative costs increased during the 24-year period.

As of 1982, the eight states could be divided into three distinct groups in terms of their average costs for permanent disability cases compared to the national averages. Michigan, Pennsylvania, and the District of Columbia had permanent disability costs that on average were 80 percent or more above the national average; New Jersey and New York had costs more than 40 percent below the national average; and California, Florida, and Wisconsin all had costs within 45 percent of the national average.

The total costs of permanent disability cases in the eight jurisdictions, shown in tables 3.14 to 3.17, reflect the developments in the number of such cases and their average costs shown in the two previous sets of tables.[9]

Nationally, the share of all cash benefits accounted for by permanent total disability cases increased from 2.64 percent in 1958 to 3.54 percent in 1982 (table 3.14). In the eight states, the permanent total share

Table 3.13
All Types of Permanent Disability Cases in Eight States, 1958-82
Average Costs and Costs Relative to U.S. Averages

Jurisdiction(s)	1958[1]		1968[1]		1973[1]		1978[1]		1982[1]	
	Cost[2] (dollars)	Cost relative to U.S. cost (%)	Cost[2] (dollars)	Cost relative to U.S. cost (%)	Cost[2] (dollars)	Cost relative to U.S. cost (%)	Cost[2] (dollars)	Cost relative to U.S. cost (%)	Cost[2] (dollars)	Cost relative to U.S. cost (%)
U.S. average	1,957		3,379		4,599		8,178		11,013	
Eight-state average	1,964	100.39	3,400	100.62	4,485	96.44	7,218	88.26	14,693	133.41
California	3,064	156.57	4,127	122.14	5,398	117.38	7,290	89.14	8,407	76.34
District of Columbia	3,956	202.19	4,707	139.29	10,711	232.89	24,933	304.87	27,447	249.22
Florida	2,249	114.92	3,699	109.49	4,910	106.75	8,450	103.33	15,898	144.35
Michigan	4,231	216.25	8,494	251.40	8,397	182.58	14,784	180.78	20,519	186.31
New Jersey	1,141	58.29	2,015	59.64	2,617	56.90	3,711	45.38	6,269	56.92
New York	1,616	82.60	2,430	71.92	3,072	66.81	4,997	61.10	6,322	57.41
Pennsylvania	3,735	190.86	4,866	144.01	7,585	164.91	19,903	243.37	22,133	200.97
Wisconsin	2,789	142.54	3,775	111.73	4,520	98.27	7,107	86.90	10,549	95.79

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," exhibits dated: for 1958, no date; for 1968, March 15, 1972; for 1973, July 1976; for 1978, April 1982; and for 1982, June 1986.

1. The data shown are for the insurance industry policy years that most closely correspond to the calendar years shown. For Pennsylvania, e.g., the 1982 data are for insurance policies in effect between April 1982 and March 1983.

2. The cost is the average cost of indemnity (cash) benefits for all types of permanent disability cases (permanent total, major permanent partial, and minor permanent partial) in the state.

Table 3.14
Total Costs of Permanent Total Disability Cases as a Share of All Cash Benefits 1958-82, in Eight States

Jurisdiction(s)	1958[1]		1968[1]		1973[1]		1978[1]		1982[1]	
	Share of all costs[2] (%)	Share in state as % of U.S. share	Share of all costs[2] (%)	Share in state as % of U.S. share	Share of all costs[2] (%)	Share in state as % of U.S. share	Share of all costs[2] (%)	Share in state as % of U.S. share	Share of all costs[2] (%)	Share in state as % of U.S. share
U.S. average	2.64		2.54		3.56		3.66		3.54	
Eight-state average	2.59	97.95	2.26	89.01	3.23	90.77	4.55	124.32	4.43	125.14
California	1.98	74.79	3.01	118.42	2.36	66.31	2.35	64.20	2.79	78.69
District of Columbia	1.68	63.72	.57	22.34	9.27	260.68	2.26	61.68	7.17	202.47
Florida	4.11	155.47	2.28	89.82	3.88	109.21	2.62	71.58	4.88	137.95
Michigan	2.83	106.92	1.38	54.45	3.84	108.02	5.07	138.52	2.54	71.68
New Jersey	2.74	103.79	1.86	73.25	2.90	81.64	4.61	126.18	2.75	77.82
New York	1.84	69.63	.66	25.96	1.43	40.08	1.99	54.31	.98	27.60
Pennsylvania	5.19	196.47	4.98	195.93	9.13	256.65	13.58	371.25	11.27	318.30
Wisconsin	5.18	195.99	4.26	167.45	3.12	87.61	1.68	45.87	3.07	86.65

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," exhibits dated: for 1958, no date; for 1968, March 15, 1972; for 1973, July 1976; for 1978, April 1982; and for 1982, June 1986.

1. The data shown are for the insurance industry policy years that most closely correspond to the calendar years shown. For Pennsylvania, e.g., the 1982 data are for insurance policies in effect between April 1982 and March 1983.

2. The share is the total cost of indemnity (cash) benefits for permanent total disability cases as a percentage of all indemnity benefits in the state.

increased even more rapidly, rising from 2.59 percent of all cash benefits in 1958 (98 percent of the national share) to 4.43 percent in 1982 (125 percent).

Among individual states, the shares of all cash benefits accounted for by permanent total cases are quite volatile, reflecting in part the relatively small number of such cases. Every state had a swing in its share (as a percentage of the national average share) of at least 40 percent during the 20-year period. An extreme example is the District of Columbia, where the permanent total share was 22 percent of the national average in 1968, 261 percent in 1973, 62 percent in 1978, and 202 percent in 1982. Only New York had a permanent total share below the national average in all five years; only Pennsylvania was consistently above the national average. As of 1982, Pennsylvania (with a 318 percent figure) was far above the other jurisdictions in its share of cash benefits accounted for by payments for permanent total cases; Florida and the District of Columbia were also above the national average; and California, Michigan, New Jersey, and Wisconsin were from 10 to 30 percent below the national average. New York's share was almost 75 percent below the national average. The high cost in Pennsylvania is due both to its relatively large number of permanent total cases (table 3.6) and the relatively high cost of each case (table 3.10). New York achieved the lowest share of cost accounted for by permanent total benefits in 1982 (table 3.14) both because its average cost for permanent total cases was lower than in the other seven jurisdictions (table 3.10) and because permanent total cases were quite rare in the state (table 3.6).

Major permanent partial disability cases accounted for an increasing share of all cash benefits nationally through time, rising from 24 percent in 1958 to 43 percent in 1982 (table 3.15). The average share in the eight states for major permanent partial disability benefit cases was consistently within 5 percent of the U.S. share. There were, however, large swings in some states. In Florida and Michigan, major permanent partial disability costs as a percentage of the national average increased by 25 percent or more, while Pennsylvania's share dropped from 154 percent of the national average in 1958 to 52 percent in 1982. As of 1982, the District of Columbia stood apart in terms of the cost of major permanent partial disability cases: they accounted for 66 percent of all cash benefits in that jurisdiction, a share that was 154 percent of the national average share. In Michigan, the share for major permanent partial disability benefits was more than 25 percent above

Table 3.15
Total Costs of Major Permanent Partial Disability Cases as a Share of All Cash Benefits *1958-82, in Eight States*

Jurisdiction(s)	1958[1]		1968[1]		1973[1]		1978[1]		1982[1]	
	Share of all costs[2] (%)	Share in state as % of U.S. share	Share of all costs[2] (%)	Share in state as % of U.S. share	Share of all costs[2] (%)	Share in state as % of U.S. share	Share of all costs[2] (%)	Share in state as % of U.S. share	Share of all costs[2] (%)	Share in state as % of U.S. share
U.S. average	24.45		30.42		31.27		37.99		42.77	
Eight-state average	25.35	103.70	29.08	95.60	32.45	103.77	37.41	98.47	42.18	98.63
California	33.38	136.52	37.38	122.90	42.61	136.25	43.85	115.41	45.29	105.90
District of Columbia	33.10	135.40	38.07	125.18	56.68	181.24	73.44	193.30	65.70	153.62
Florida	20.97	85.78	25.64	84.29	31.39	100.38	46.56	122.54	49.03	114.65
Michigan	22.68	92.76	39.27	129.11	34.26	109.55	48.65	128.05	54.37	127.13
New Jersey	16.45	67.27	15.49	50.92	18.20	58.19	23.99	63.14	25.58	59.81
New York	21.73	88.89	18.67	61.37	25.07	80.16	30.97	81.50	36.71	85.85
Pennsylvania	37.66	154.04	30.86	101.45	23.32	74.57	22.55	59.34	22.12	51.73
Wisconsin	17.19	70.33	27.45	90.27	22.56	72.12	30.30	79.75	38.64	90.34

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," exhibits dated: for 1958, no date; for 1968, March 15, 1972; for 1973, July 1976; for 1978, April 1982; and for 1982, June 1986.

1. The data shown are for the insurance industry policy years that most closely correspond to the calendar years shown. For Pennsylvania, e.g., the 1982 data are for insurance policies in effect between April 1982 and March 1983.

2. The share is the total cost of indemnity (cash) benefits for major permanent partial disability cases as a percentage of all indemnity benefits in the state.

Table 3.16
Total Costs of Minor Permanent Partial Disability Cases as a Share of All Cash Benefits 1958-82, in Eight States

Jurisdiction(s)	1958[1]		1968[1]		1973[1]		1978[1]		1982[1]	
	Share of all costs[2] (%)	Share in state as % of U.S. share	Share of all costs[2] (%)	Share in state as % of U.S. share	Share of all costs[2] (%)	Share in state as % of U.S. share	Share of all costs[2] (%)	Share in state as % of U.S. share	Share of all costs[2] (%)	Share in state as % of U.S. share
U.S. average	35.40		34.78		31.37		25.81		22.19	
Eight-state average	36.63	103.47	36.59	105.16	33.77	107.66	26.91	104.28	20.91	94.27
California	41.64	117.63	42.68	122.71	37.84	120.65	35.17	136.29	34.03	153.40
District of Columbia	25.07	70.82	25.81	74.20	13.73	43.77	6.03	23.38	4.30	19.37
Florida	31.42	88.76	33.05	95.02	28.44	90.69	22.16	85.86	9.31	41.94
Michigan	15.25	43.08	20.43	58.73	23.80	75.88	11.75	45.55	11.84	53.37
New Jersey	64.55	182.36	49.65	142.75	46.44	148.06	45.65	176.90	49.10	221.32
New York	31.92	90.19	37.98	109.19	30.50	97.23	21.72	84.16	18.26	82.30
Pennsylvania	8.89	25.11	9.78	28.11	20.90	66.65	16.90	65.50	18.25	82.28
Wisconsin	40.76	115.13	34.28	98.54	32.85	104.74	23.48	90.98	22.22	100.15

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," exhibits dated: for 1958, no date; for 1968, March 15, 1972; for 1973, July 1976; for 1978, April 1982; and for 1982, June 1986.

1. The data shown are for the insurance industry policy years that most closely correspond to the calendar years shown. For Pennsylvania, e.g., the 1982 data are for insurance policies in effect between April 1982 and March 1983.

2. The share is the total cost of indemnity (cash) benefits for minor permanent partial disability cases as a percentage of all indemnity benefits in the state.

the national average; California, Florida, New York, and Wisconsin were within 15 percent of the national average; and New Jersey and Pennsylvania were each more than 40 percent below the national average. In Pennsylvania, a high average cost for each major permanent partial disability case (table 3.11) was more than offset by the relative scarcity of such cases (table 3.7). The District of Columbia, on the other extreme, had both high average costs and a relatively large number of these cases.

Minor permanent partial disability cases represented a decreasing share of all cash benefits nationally between 1958 and 1982 (table 3.16). The importance of minor permanent partial cases declined on average in the eight states as well, with the eight-state and national shares within 8 percent of each other in each of the five years. Again there were divergences among the individual states and some dramatic movements at that level. In the District of Columbia, for example, the share of all cash benefits represented by minor permanent partial disability cases relative to the national average share decreased by more than 50 percent between 1958 and 1982, while in Pennsylvania there was a more than 50 percent increase. (Even with this increase, Pennsylvania remained below the national average in the relative importance of minor permanent partial disability benefits.) As of 1982, the shares of all cash benefits devoted to minor permanent partial disability cases were more than 50 percent above the national average share in New Jersey and California, and at the other extreme, at least 40 percent below in Michigan, Florida, and the District of Columbia. In New York, Pennsylvania, and Wisconsin, the shares were within 20 percent of the national average.

The shares of dollars accounted for by all three types of permanent disability cases (permanent total, major permanent partial, and minor permanent partial) are examined in table 3.17 and in graph 3.1. Nationally, the share increased from 62 percent in 1958 to 69 percent in 1982. The experience in the eight states on average was similar, with an increase from 65 percent in 1958 to 68 percent in 1982.

Within individual states, the percentage of total benefits represented by all permanent disability benefits combined did not undergo as much change during the 20-year period as did the percentages represented by individual types of permanent disability benefits, in part because the movements of the particular types were offsetting in some states. Nonetheless, there were some significant movements through time, and as of 1982 the individual jurisdictions diverged widely.

Table 3.17
Total Costs of All Types of Permanent Disability Cases as a Share of All Cash Benefits 1958-82, in Eight States

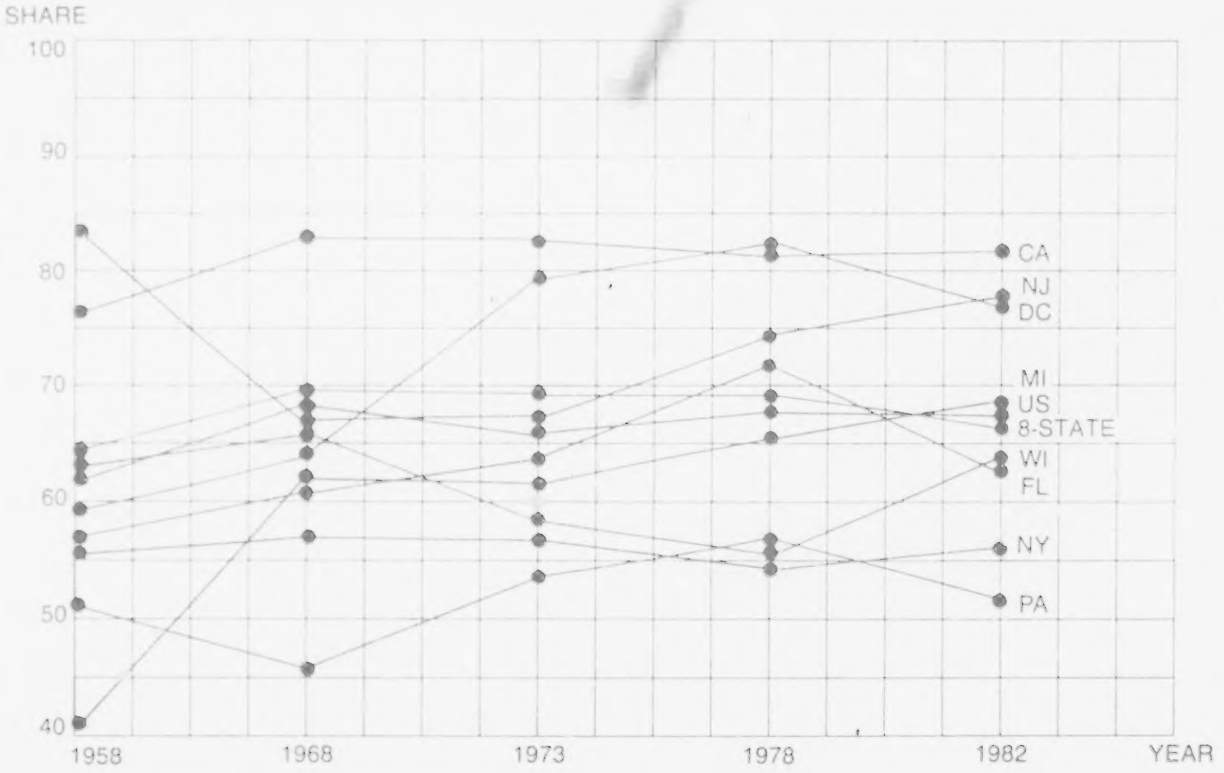
Jurisdiction(s)	1958[1]		1968[1]		1973[1]		1978[1]		1982[1]	
	Share of all costs[2] (%)	Share in state as % of U.S. share	Share of all costs[2] (%)	Share in state as % of U.S. share	Share of all costs[2] (%)	Share in state as % of U.S. share	Share of all costs[2] (%)	Share in state as % of U.S. share	Share of all costs[2] (%)	Share in state as % of U.S. share
U.S. average	62.49		67.74		66.20		67.46		68.49	
Eight-state average	64.57	103.33	67.92	100.26	69.45	104.91	68.87	102.09	67.52	98.59
California	76.99	123.21	83.07	122.63	82.81	125.10	81.37	120.62	82.11	119.88
District of Columbia	59.86	95.79	64.45	95.14	79.68	120.38	81.73	121.16	77.16	112.66
Florida	56.50	90.41	60.97	90.01	63.72	96.26	71.33	105.75	63.22	92.30
Michigan	40.75	65.26	61.08	90.17	61.90	93.51	65.47	97.06	68.75	100.37
New Jersey	83.74	134.01	67.03	98.91	67.54	102.03	74.25	110.08	77.44	113.06
New York	55.50	88.81	57.30	84.59	56.99	86.10	54.67	81.05	55.95	81.69
Pennsylvania	51.74	82.80	45.61	67.34	53.35	80.60	53.02	78.61	51.64	75.40
Wisconsin	63.13	101.02	65.99	97.41	58.52	88.41	55.45	82.21	63.92	93.33

SOURCE: National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," exhibits dated: for 1958, no date; for 1968, March 15, 1972; for 1973, July 1976; for 1978, April 1982; and for 1982, June 1986.

1. The data shown are for the insurance industry policy years that most closely correspond to the calendar years shown. For Pennsylvania, e.g., the 1982 data are for insurance policies in effect between April 1982 and March 1983.

2. The share is the total cost of indemnity (cash) benefits for all types of permanent disability cases (permanent total, major permanent partial, and minor permanent partial) as a percentage of all indemnity benefits in the state.

Graph 3.1
Share of All Cash Benefits Accounted for by Permanent Disability Cases, 1958-72, in Eight States



In three jurisdictions—California, New Jersey, and the District of Columbia—the share of all benefits going to permanent disability cases in 1982 was at least 10 percent above the national average share, but the three reached that status by different routes. The California share was consistently above the national average share by about 20 percent for all five years between 1958 and 1982. New Jersey began as the highest share state in 1958, dropped slightly below the national share in 1968, and has steadily increased its share since 1973 so that by 1982 it ranks only behind California. The District of Columbia has an even more volatile history, ranking below the national average share in 1958 and 1968, then increasing rapidly so that by 1978 the jurisdiction ranked first among the eight states in share of benefits devoted to permanent disability benefits, and then declining somewhat between 1978 and 1982, but still remaining about 13 percent above the national average.

In two jurisdictions—New York and Pennsylvania—the share of all benefits going to permanent disability benefits in 1982 was at least 10 percent below the national average share, a record these jurisdictions had consistently maintained over the 1958 to 1982 period.

Three jurisdictions—Florida, Michigan, and Wisconsin—were within 10 percent of the national average share of benefits going to permanent disability benefits as of 1982. Florida had always been within 10 percent of the national average share between 1958 and 1982. Michigan had been well below the national average share in 1958, but was within 10 percent of the national average from 1968 to 1982. Wisconsin had begun with a share of benefits going to permanent disability cases slightly above the national average in 1958, had seen that share steadily decline to 82 percent of the national average share in 1978, and then rebounded to 93 percent of the national share as of 1982.

Significance of the Data

The causes and significance of the movements in the numbers and costs of permanent disability benefits will be examined in more detail in subsequent chapters that deal with individual states. Here one aspect of the significance will be examined: the relationship between the share of all benefits accounted for by permanent disability benefits and the employers' costs of workers' compensation insurance.

Information on the employers' costs of workers' compensation insurance for a representative sample of employers is presented in table 3.18.[10] The figures are adjusted manual rates, which are insurance

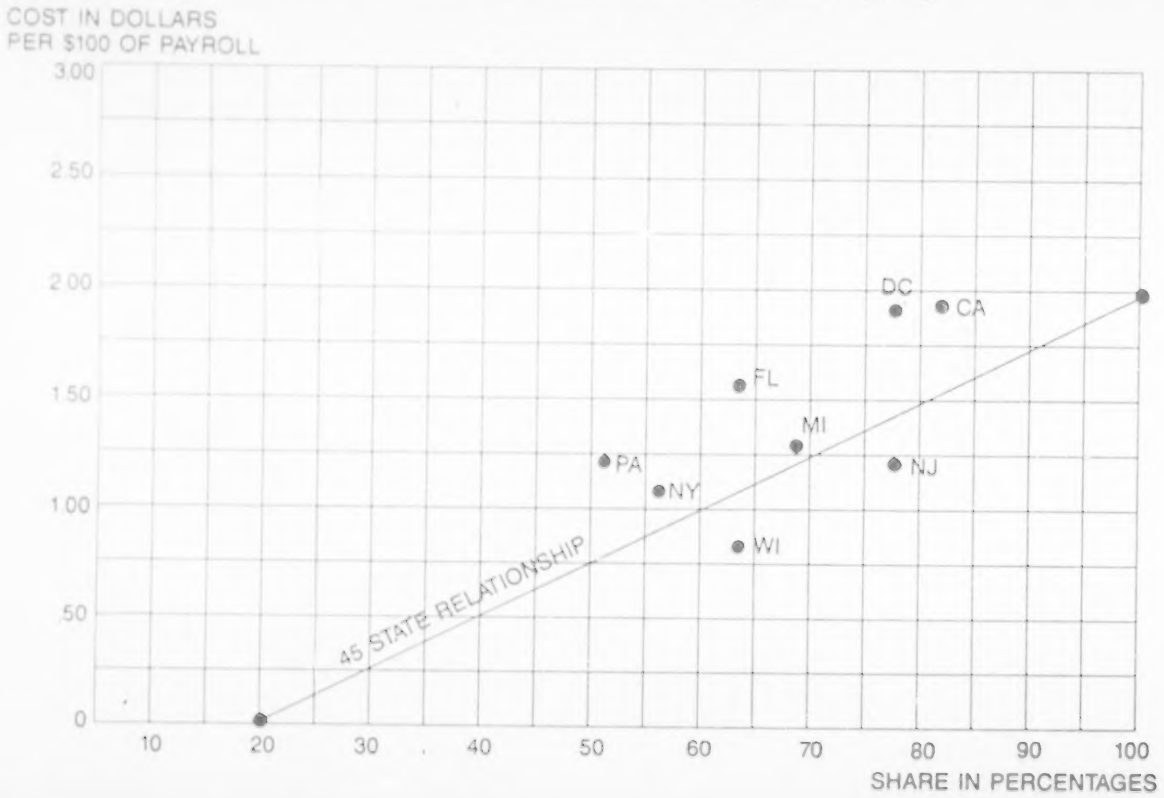
Table 3.18
Employers' Costs of Workers' Compensation Insurance as a Percentage of Payroll, 1958–74, in Nine States

	1958		1965		1972		1978		1984 high		1984 low	
Jurisdiction	Costs	Costs in state as % of U.S. average	Costs	Costs in state as % of U.S. average	Costs	Costs in state as % of U.S. average	Costs	Costs in state as % of U.S. average	Costs	Costs in state as % of U.S. average	Costs	Costs in state as % of U.S. average
U.S. average (28 states)	0.618	—	0.791	—	0.783	—	1.420	—	1.434	—	1.368	—
California	0.707	114.4	1.183	149.6	1.102	140.7	2.135	150.4	1.936	135.0	1.936	141.5
D.C.					0.737	94.1	3.502	246.7	1.911	133.3	1.909	139.5
Florida							2.641	186.0	1.674	116.7	1.552	113.5
Michigan	0.450	72.8	0.715	90.4	0.914	116.7	1.890	133.1	1.798	125.4	1.283	93.8
New Jersey	0.911	147.4	1.039	131.4	1.224	156.3	1.687	118.8	1.231	85.8	1.231	90.0
New York					0.864	110.3	1.770	124.6	1.107	77.2	1.079	78.9
Ohio	0.627	101.5	0.820	103.7	0.885	113.0	1.550	109.2	1.521	106.1	1.521	111.2
Pennsylvania	0.355	57.4	0.386	48.8	0.387	49.4	1.173	82.6	1.339	93.4	1.235	90.3
Wisconsin	0.523	84.6	0.603	76.2	0.505	64.5	0.752	53.0	0.846	59.0	0.846	61.8

SOURCE: U.S. average: weighted observations from Burton, Hunt, and Krueger (1985), table 28. Individual state data from Burton, Hunt, and Krueger (1985), table 26.

Graph 3.2

Employers' Costs of Workers' Compensation (1984) as a Function of the Share of All Cash Benefits Accounted for by Permanent Disability Cases (1982)



premiums in dollars per $100 of payroll. The adjusted manual rates can be interpreted as the percentage of payroll expended on workers' compensation insurance after factors such as experience rating and dividends are considered. The data are for selected years between 1958 and 1984 that roughly correspond to the years shown in the previous tables in this chapter dealing with numbers and costs of permanent disability benefits. The data are available for nine of the states in our study. As shown in table 3.18, data for the nine states are available only since 1978, and so the discussion focuses on insurance costs in 1978 and 1984. Two sets of data are presented for 1984—high adjusted manual rates, which reflect the traditional factors that modify insurance rates, such as experience rating and dividends, and low adjusted manual rates, which also reflect the competitive devices that have emerged in recent years in workers' compensation, including open competition and deviations. Hunt, Krueger, and Burton (1985) argue that the low adjusted manual rates are the most accurate measure of costs in 1984, and so we use these rates.

There is a considerable range in workers' compensation insurance rates in 1984 among the jurisdictions in our study, with California about 40 percent above the national average (28 states) and Wisconsin about 40 percent below. The relationship between insurance costs and share of all benefits accounted for by permanent disability cases is examined in graph 3.2. Eight of the ten states (all but Ohio and Nevada) have appropriate data and are shown in the graph. There is a general positive relationship between the share of permanent disability benefits and the cost of workers' compensation insurance. The District of Columbia and California are among the three high-share states and are the two high-cost states. Pennsylvania and New York are among the three low-share and three low-cost states.

The generally positive relationship between share and costs for the eight states shown in graph 3.2 is hardly conclusive, given the small sample size. More persuasive evidence is summarized in table 3.19. There are 45 states with data on the 1982 share of all costs accounted for by permanent disability benefits (table 3.5) for which data are available on the employers' costs of workers' compensation insurance in 1984. There is a positive correlation between the variables; the regression results suggest that a 10 percent increase in share is associated with an increase in workers' compensation premiums of $0.24 per $100 of payroll. This regression result is shown on graph 3.2 as the "45-state relationship" line. The eight states of particular concern in our study

are scattered along this line (although most are above, suggesting higher costs than would be expected given the share of costs accounted for by permanent disability benefits in these states).

Table 3.19
Statistical Relationships Between Employers' Costs of Workers' Compensation and Share of All Cash Benefits Accounted for by Permanent Disability Cases

Data	Correlation coefficient	Regression results with costs as dependent variable[2]
1982 share/1984 costs[1]	0.401	-0.431 + .024 share (.575) (.008)
1978 share/1978 costs	0.364	-0.453 + .028 share (.724) (.011)
1978–1982 change in share/ 1978–1984 change in costs[1]	0.381	-0.259 + .030 share (.079) (.011)

SOURCE: 1982 share from table 3.5; 1978 share from source cited in table 3.1, n.1; 1978 and 1984 cost data from Burton, Hunt, and Krueger (1985), table 26.

1. 1984 costs are low adjusted manual rates.

2. Standard errors are in parentheses.

The relationship between 1982 share of costs due to permanent disability benefits and 1984 insurance costs is positive and the relationship is statistically significant. Statistical results that tend to confirm the positive relationship between shares and insurance costs are included in table 3.19. For 1978 shares and 1978 insurance costs, the relationship is also positive; the regression results indicate that a 10 percent increase in share is associated with a $0.28 increase in workers' compensation premiums per $100 of payroll. In addition, there is a positive relationship between changes in shares in each state between 1978 and 1982 and changes in insurance costs in each state between 1978 and 1984; the regression results indicate that a 10 percent increase in share over time is associated with a $0.30 increase in workers' compensation premiums per $100 of payroll.

The similarity of the results for the three regressions reported in table 3.19 lend support to the view that share of costs going to permanent

disability benefits and workers' compensation insurance costs are positively associated, especially since the relationships between the variables are statistically significant in each of the regressions. We do not wish to overstate the importance of the relationship between permanent disability benefits and costs. Burton and Krueger (1986) have argued that changes in the levels of all types of benefits were important determinants of insurance cost developments between 1972 and 1983 in Connecticut, New Jersey, and New York. In addition, a statistical examination by Krueger and Burton (1984) shows that interstate differences in benefit levels other than permanent partial benefits and differences among states in insurance arrangements are significant determinants of interstate differences in insurance costs. It is obvious from graph 3.2 that factors other than the share of costs accounted for by permanent disability benefits must account for some of the interstate differences in insurance costs. Nonetheless, the differences in shares appear to be one important factor in explaining interstate cost differences, which underlines the relevance of the present study's focus on permanent disability benefits.

Conclusions

The extensive data in this chapter can be viewed at several levels of aggregation. At the national level (tables 3.1 to 3.3), the numbers of permanent disability cases relative to all types of cases declined between 1958 and 1982, while the average costs of such cases relative to the costs of temporary total cases increased. The shares of all cash benefits accounted for by permanent disability cases increased from 1958 to 1978, but subsequently have consistently been about two-thirds of all cash payments. Thus, at the national level, the appearance is one of relative stability and gradual movements in the number and costs of permanent disability cases. The average experience in the eight states with permanent disability benefits also is relatively stable. Numerically, between 1958 and 1978 all permanent disability cases accounted for about a 10 percent larger share in the eight states than nationally (table 3.9); by 1982, the eight-states share was about 10 percent below the national share. Meanwhile, average costs for all permanent disability cases in the eight states declined from about 100 percent of the national average in 1958 to 88 percent in 1978 and then increased to about 33 percent above the national average in 1982 (table 3.13). The consequence of the offsetting trends is that the share of total cash benefits accounted for by permanent disability cases in the eight states has con-

sistently been within a few percentage points of the national average share from 1958 to 1982 (table 3.17).

The relative stability and gradualness of change at the national and eight-state levels of aggregation mask a great deal of diversity among the states as of 1982 in the relative numbers and average costs of permanent disability cases and in shares of all cash benefits accounted for by those cases, and belies the significant changes that have occurred from 1958 to 1982 in many jurisdictions. The full extent of diversity and change can be appreciated only by studying the individual state experience over the twenty years, but the intermediate level of aggregation in graph 3.1 provides a useful summary.

In the balance of part II of this study we attempt to explain some of the more significant developments in numbers and costs by examining changes in procedure and criteria in the states since 1958. We also attempt to show how the changes in cost levels from 1958 to 1982 generated pressures for change in the approaches to compensating permanent disabilities that in some jurisdictions resulted in statutory or administrative changes by 1986, the terminal point in our study.

NOTES

1. The policy years vary among states and do not always correspond with calendar years. For example, the 1982 data for the District of Columbia shown in the tables in this chapter pertain to policies written between February 1982 and January 1983.

2. At one time, the distinction was based on the severity of the injury. Thus, an impairment of 50 percent or more of an arm was treated as a major permanent partial, while an impairment of less than 50 percent of an arm was treated as a minor permanent partial. Since 1967, the distinction between major and minor permanent partial has been based upon the amount of cash benefits paid in the case. For example, for policies written in the District of Columbia in 1982, the "critical value" was $10,000. The critical values are changed for each state whenever the benefit levels for permanent partial are amended.

The distinctions between major and minor permanent partial disability cases in states with independent rating bureaus may depend on procedures different from the critical value procedure used in states that rely on the National Council on Compensation Insurance for rate making. States with independent rating bureaus that are part of our ten-state study are California, New Jersey, and New York. The potential inconsistency among the jurisdictions in the procedures used to separate major and minor permanent partial disability cases is a reason why most of our analysis in this report relies on the total costs of all permanent disability cases in various states, a statistic that is not affected by the division between the major and minor categories.

3. The use of the critical values is explained in note 2, above. As of 1982, the critical value was $10,000 in the District of Columbia, $16,000 in Michigan, and $14,500 in Wisconsin.

4. The critical values discussed in the preceding two notes are changed only when there are statutory changes in permanent partial disability benefits. In most cases, the amounts of permanent partial disability benefits depend in part on the workers' preinjury wages. Thus as wages increase through time in a state without statutory changes, there is likely to be a shift in cases from the minor to the major permanent partial disability categories. For example, the critical value was $10,000 in the District of Columbia between 1972 and 1984, which probably is a factor explaining the declining share of minor permanent partial cases in the District between 1973 and 1982 shown in table 3.8.

5. Some cases may be filed two or more years after the policy year expires but are nonetheless charged to that year. This might happen, for example, for a work-related disease where the exposure took place in the policy year but the disease did not manifest itself until years later.

6. Other movements between types of cases are possible. For example, a case initially classified as temporary total may result in a payment of death benefits. Cases can also move to less serious categories.

7. The actual ultimate report on 1982 cases is not yet available because not enough time has elapsed, but a simulated ultimate report on 1982 cases has been prepared by the National Council on Compensation Insurance. The simulation is based on data showing the first to ultimate report development factors for reports from earlier policy years for which actual ultimate data are already available.

8. For exhibits on an ultimate report basis prepared by the National Council on Compensation Insurance, all states were developed by injury type to an ultimate report basis for losses and to a fifth report basis for the number of cases. There are several exceptions, including New Jersey where losses are not developed by any type of injury (just for indemnity losses for all types of injuries combined) and New Jersey and New York, where losses are only developed to a fifth report basis.

9. Actually the share of all costs within a state accounted for by permanent disability cases depends on the number of such cases and their average costs relative to the costs of other types of cases within that state, and in particular temporary total disability cases, which account for the bulk of each state's cases.

10. The methodology used to derive the data on the employers' costs of workers' compensation insurance is presented in Burton and Krueger (1986).

Chapter 4
Procedures for Permanent Partial Benefits

Workers' compensation procedures are carried out by both private parties and public agencies. Typically five actors are involved—the injured worker, his employer, the insurer of the employer's liability, the provider of medical care, and the state agency—although one actor may double and play two roles at a time. For example, the employer may self-insure and thus dispense with the services usually provided by a private insurance carrier, although the company may still hire a service bureau to administer its claims. Or, if the state has an exclusive state insurance fund, the state agency may carry out the claims management functions usually performed by private carriers. But no matter how these roles are distributed, all workers' compensation claims involve an injured worker, his employer, the insurer of the employer's liability, the provider of medical care, and a workers' compensation agency.

Any of these actors may be represented by legal counsel. The worker may be represented at some stage of the process by a lawyer, and the carrier and the employer may also employ counsel if the case reaches the contested level. The legal aspects of the administrative process have traditionally received the most attention. We do not ignore these, but choose to emphasize the other aspects.

The process is complex, not only because of the number of parties with or without their legal representation, but because of the blending of private administration with public interest. The laws mandate specific payments but generally leave the claims management in private hands. The exact combination of public standards and private administration in workers' compensation is not encountered either in the administration of tort suits or in the public income transfer programs.

The Claims Management Function

Common to all systems, whether tort suits, workers' compensation cases, or social security claims, is the payment of a claim. The claims management function consists of the following five procedures:

(1) *Opening procedures.* Usually a claim for benefits is made, although in some instances news of the event may by itself trigger an administering agency to proceed with payment.

(2) *Validation procedures.* In all systems, the validity of the claim for payment must be scrutinized. Was the person insured, or did he otherwise fall within the population eligible for receipt of the benefits? Did the event occur as claimed? Did it result in the alleged consequence? Is the extent of the injury or monetary loss as large as is claimed? What standard shall be used to measure these losses? In some tort cases it is necessary to determine who was at fault; in workers' compensation it is sufficient to determine whether the injury was connected with the insured activity. In either case, if reserves are to be set aside, estimates must be made of the eventual total cost of the claim.

(3) *Payment procedures.* In a sense this is the heart of the matter. Whether it is cash transfers or payment in kind, the appropriate account must be debited, and the payments made and delivered in a timely fashion as prescribed by the statutes or agreement of the parties. The payment may be made in a lump sum or in periodic installments. Separate and more complex procedures are required for processing medical claims and other benefits in kind, since another party, the provider, is involved.

(4) *Contested procedures.* If the claim is denied and the injured party protests, administrative procedures must allow for reconsideration of such claims and possible modification of the initial decision. If the matter is not satisfactorily settled and the case is controverted, further legal procedures come into play. The dissatisfied claimant may hire an attorney who may perform, or cause to be performed, additional administrative procedures. Another investigation of the claim may take place, other examinations to determine medical condition may be authorized, and a whole new cadre of people may become involved.

(5) *Closing procedures.* In the event that the claim is denied, or at the expiration of the period of payment, the file is closed and the case ended.

Responsibility for Claims Management

In a public program, such as the social security system, these claims procedures become the responsibility of a governmental unit such as the Social Security Administration. The agency requires information from the applicant, the physician, and possibly vocational experts.

However, the central administrative responsibility remains with the agency that administers, supervises, and eventually pays or denies claims, subject to appeals to the courts.

In tort cases, the administration of the claims management function is usually the responsibility of a private insurance carrier whose activities are constrained by various statutes and decisional law. The claimsperson is a guardian of the assets of the carrier and, in general, seeks to minimize the amounts the carrier pays. The claimant is naturally concerned with maximizing the amounts due him. The resolution of that contest becomes a matter of public concern only in the event of an appeal to the judicial system.

The administration of workers' compensation is a blend of private and public interests. The administration of the claims management functions is the responsibility of the insurer, whether it is a private insurance company, a competitive or exclusive state fund, or (if it is self-insured) the firm itself. It is the insurer under the workers' compensation law that has the primary responsibility for the administration of the claims management function. It pays the claim. And, unless the workers' compensation agency itself administers an exclusive state fund, the state agency does not pay the claim. Thus, unlike the Social Security Administration, the workers' compensation agency does not pay benefits to injured workers, nor does it pay treating physicians or any other provider of services. Yet there comes a time, at differing stages of the claim's process depending upon the jurisdiction, when the workers' compensation agency is charged with substantial responsibility for administrative procedures.

The patient suing his physician in a malpractice suit can settle for any amount that is agreeable to him, his doctor, and the insurance carrier. No state agency will interfere with the voluntary settlement on the grounds that it is not sufficient. At the opposite end of the administrative spectrum, the person qualifying for disability insurance benefits under Social Security will receive a specific amount stipulated by statute. Nongovernmental parties have little or no influence on the amount of the benefits. Workers' compensation stands between these models. The claims management function and considerable control over the amount of the benefits rests with the insurer, which is normally in the private sector, but the state workers' compensation agency supervises the application of the statute to ensure that the objectives of workers' compensation are met. This blending of public and private roles adds to the complexity of workers' compensation administration.

The Objectives of Workers' Compensation

The National Commission on State Workmen's Compensation Laws (1972, p. 99) considered an effective delivery system to be one of the five objectives of a modern workers' compensation program. It recognized that such a system is required in order to achieve the four basic objectives: broad coverage, adequate income maintenance, necessary medical care and rehabilitation services, and safety incentives. The Commission saw an effective delivery system as a means to an end, not an end in itself. Its performance was to be evaluated relatively in comparison with other systems, and absolutely by the degree of accomplishment of the four basic objectives of workers' compensation.

The whole theory of workers' compensation administration is based on the assumption that there should be a direct public interest in the compensation paid to workers injured at work. The type and amount of such payments, the conditions under which they are to be made, and the medical care workers are to be provided are prescribed in general terms by the state statutes, which also establish an administrative agency to insure these prescriptions are satisfied.

There are, however, wide variations among states in the procedures used for permanent partial disability cases. Each state workers' compensation agency keeps records, monitors claims that are paid, provides some system to evaluate permanent partial disability, and also provides a forum for the adjudication of disputes. We will discuss each of these functions further. First we provide a general description of state agencies' administrative procedures, a description that is applicable in some measure to all states, but fully applicable to none.

General Introduction to Procedures

Uncontested Cases

A claim typically begins with an accidental injury, which triggers notice by the employee to the employer, and the filing by the employer of a First Report of Injury. In the typical state in which a private insurance carrier has the primary responsibility for paying claims, a copy of the report will go to the carrier, alerting it to the fact that a possible claim is pending, and a copy will also go to the state agency.

The EFR may be the document that initiates a claim for benefits, or a separate form may be required. In some states, it will be necessary for the carrier to file the additional report, or a simple notice to the

agency that payments have actually begun may be sufficient. Initial payments typically are for temporary total disability benefits.

As noted, the payment of these benefits can begin simply by the carrier accepting the claim without further formality. In some states, the carrier is called upon either to contest the claim or to begin payments within a stipulated number of days; in other states some form of paper work, possibly an agreement with the employee, must be consummated before payments begin. Usually temporary disability benefit payments stop once an employee goes back to work, or, if he does not return, after maximum medical rehabilitation has been achieved. The extent of permanent disability is assessed at that time or (in some states) a stipulated number of weeks after that date. In a minority of cases, such as amputations without further complications, the amount of benefits may be determined exclusively by a schedule, in which case there may be no controversy and payment may be made soon after the injury occurs.

Contested Cases

In the more typical case, the fact of permanent disability is conceded, but the exact nature and extent of permanent disability, and the translation of the nature and extent of disability into a particular dollar benefit, are matters of some controversy. This is not to say that the case cannot be handled voluntarily by the carrier and without resort to the controverted procedures. In California, the extent of the applicant's impairment may be determined by the rating bureau based upon medical reports, and the carrier may pay the amount suggested by the informal rating. If accepted by the employee, the processing of the case comes to an effective end.

In other states where no rating bureau exists, the carrier might have the worker examined by a physician, who assesses the percentage of disability and consequently the benefits to which the worker is entitled. Obviously, the likelihood that that amount will be accepted is greater in a case of some uncomplicated anatomical loss than in cases involving subjective complaints. Even in simple cases, in the event of some disagreement, the impairment may be rerated by the carrier based upon whatever additional information may be supplied.

If dissatisfaction persists, in some states the case moves to an informal procedural level. A referee may hear the case and possibly have the worker examined by a state physician, and, based upon the doctor's findings and medical records contained in the file, suggest an

amount appropriate for that particular permanent disability. Typically, such findings are not binding on either party, and the employee, if dissatisfied, has recourse to a more formal proceeding.

The formal procedures vary greatly among the states. Typically, the agency's file in the case will be part of the record. The hearing officer will have available to him all prior determinations made at the informal level, the contentions of the parties at the several stages through which the case may have passed, and the reports of examining and treating physicians. Although formal rules of evidence are usually not followed, a stenographic transcript may be taken, some orderly procedure will be followed, and the hearing officer will make rulings as to the relevance, materiality, and admissibility of the evidence before him. In some states, the hearing room appears much like a court room, with the judge sitting on a raised bench. In other states, an informal atmosphere prevails. For the most part, the hearing officer will make a decision based upon the evidence before him, but in some instances he may request impartial medical information.

The principal witnesses on both sides will usually be physicians. In an industrial illness case, an industrial hygienist may testify as to the conditions prevailing at the workplace. The employee's "testifying physician" will state that the claimant suffered a particular injury and that his present condition is a direct result of that accidental injury. He will then give his medical opinion as to the nature and extent of what in the compensation law is usually termed "disability." If it is a so-called schedule case, the physician will estimate the percentage of the arm or other extremity that he finds to be the extent of the residual permanent partial disability. If it is a nonschedule case, the percentage may be based on some arbitrary number of weeks selected as the sum for complete disability. If earnings capacity is the criterion, the physician may also testify as to the worker's inability to perform particular types of work and the employee's counsel may elicit corroborating testimony from a vocational expert.

The physician for the carrier or the defendant/employer will offer similar but opposing testimony. His estimate of the percentage of disability based upon the same schedule will be less than that offered by the physician retained by the plaintiff/employee. The equanimity and certainty with which one physician calls forth the numbers is usually not affected by his almost certain knowledge that his colleague on the opposite side will have equally firm contrary opinions. In some states,

percentage assessments by the opposing physicians will differ by predictable amounts.

The hearing officer also has some idea of how each physician will testify, what the differences will be, and where his assessment ought to lie. The lack of scientific precision is usually taken for granted, as is the fact that the assessment will be tinged by the parties' biases.

Where the estimate is to be made based on wage-earning capacity rather than on impairment or functional limitations, the attorneys for both sides may argue their cases based upon the "other" attributes of the injured worker. They may refer to his age and education, and the state of the labor market. Even in states where impairment or functional limitations presumably are the sole criteria, the physicians may shade their medical judgments based upon their estimates of the worker's chances in the labor market. In some states, the assessment of the "other factors" explicitly falls within the purview of the physician's estimates. In other jurisdictions, both the physician and the hearing officer may take these into account in some unknown and unpredictable fashion.

If the issue is actual wage loss, rather than extent of impairment or wage-earning capacity, evidence will be forthcoming as to what the employee has been earning in the labor market. Evidence, based upon his pay stubs, may be introduced as to what his actual wage loss has been. In addition, vocational experts may testify as to what he should be earning in the labor market and physicians may testify as to the work he could be doing, had he made efforts appropriate to his physical condition.

In other wage-loss cases, the employability of the worker may be at stake. In these cases, the burden may be upon the employer to show that the employee can now, in fact, return to his former job or to some other employment. The employer may offer testimony indicating that the employee has refused job offers and buttress it with medical testimony that the employee is perfectly capable of performing the work that was offered. Or, again, testimony might be forthcoming from vocational experts indicating that jobs of a particular character are available and that the employee could fill these had he the will to do so.

In yet other cases in some states, it might be workers' compensation agencies themselves that bring the case to a hearing before a hearing officer. The screening of the so-called direct settlements made by the employer and employee may raise some questions as to equity or ade-

quacy, and the case may be scheduled for a hearing. The usual avenue to the formal hearing, however, is a petition filed by the employee.

It is not unusual for cases to continue for more than one hearing. Crucial medical testimony may be lacking, or (as pointed out above) the hearing officer may want the employee to undergo an examination by a specialist. Eventually, the record in the case is closed. The hearing officer then has a stipulated amount of time in which to issue a formal opinion. His written decision may be buttressed by a short opinion or, in cases where new issues are raised, a lengthy exposition.

Many issues might be raised at the hearing that are not concerned with the nature and extent of disability. A controversy may arise over the wages that the employee was earning or over one of the many ancillary questions connected with where the accident occurred, whether the worker was an employee within the meaning of the Act, and so on.

Once a decision is issued and served on the parties, either party has a specified number of days in which to appeal. In states without a workers' compensation commission, such as New Jersey, the only appeal from a decision of the judge of the compensation agency is to the courts, where the cases are handled in much the same manner as other civil matters. More typically, however, there are provisions for appeal within the agency, possibly to a panel of the workers' compensation commission or board. At that point, procedures vary a great deal. The appeal may be based upon the record, supplemented perhaps by written briefs from both parties; or, in some cases, oral hearings may be held to supplement the record. In yet other cases, there is, in effect, a new hearing with completely new testimony presented at the board or commission level.

Appeals from either the hearing officer level or, if it exists, the appellate body within the agency are usually to the court system of the state. There may be a trial *de novo* before a judge, or even (as in Ohio) before a jury. Alternatively, the case may be heard on the basis of the record and the hearing officer's findings accepted if supported by the evidence, substantial evidence, or a preponderance of evidence, depending on the rule in the jurisdiction.

In those states in which there is an exclusive state fund with which employers are required to insure their liability, many of the administrative functions entrusted to the carriers are now transferred to the agency administering the fund. In the case of competitive, rather than exclusive,

state funds, the procedures depend on whether or not the workers' compensation agency itself is a custodian or operator of the fund, or whether the fund merely operates as another insurance carrier. For example, in California and New York, the state funds are competitive state funds and occupy the same relationship to the workers' compensation agency as does any other insurer in the state.

Administrative Functions for Permanent Disability Cases

The procedures described in the preceding section can be grouped under four headings: record keeping, monitoring, evaluation, and adjudication. We first briefly describe these functions and then more intensively examine the four functions as they are performed in the ten jurisdictions that are the primary concern of this study.

The *record keeping function* is present in all agencies. Each workers' compensation case begins with a report to the employer of an injury or disease, a copy of which is sent to the carrier and eventually to the agency. Each state requires some subsequent reporting about the individual case and its eventual disposition. States vary greatly as to the kinds of case records the agencies maintain and the diligence with which administrators follow up requests for records that do not come to them in the normal course. However logical it may be to proclaim a public interest in these matters, the total extent of some agencies' involvement may be in recording and filing what the parties themselves have done voluntarily.

Some, possibly most, states go further and are concerned with the *monitoring* function. The state agency is concerned with the equity and adequacy of the payments made voluntarily by the insurance carrier. The agency may also be concerned with the worker's rehabilitation in cases where his return to work is delayed. The agency may police the carrier's activities designed to maximize the probability of the worker's return to his job. The monitoring function may involve procedures for checking on the carrier's general performance and providing advice or sterner strictures if the carrier's performance falls short.

A third group of procedures has to do with *evaluation* of the permanent partial disability. Some agencies have prescribed procedures to evaluate, or to aid the parties in evaluating, the extent of permanent partial disability. In some states, the agency itself will take on the responsibility of determining the extent of the permanent partial disability.

In other states, the agencies will do almost nothing in this area; the parties either reach some agreement or resort to the contested procedures.

The fourth function is *adjudication*, which is undertaken by the state agencies in almost all states. Each agency has procedures to adjudicate disputes between the parties. The disputes of primary concern in this study are those concerning the liability of the employer for permanent partial benefits and those concerned with measuring the nature and extent of permanent disability.

Variations in Procedures Among the States

The 10 jurisdictions examined in this study differ in how they perform the functions of record keeping, monitoring, evaluation, and adjudication. The differences in part reflect the magnitude of the administrative burdens assigned to the states workers' compensation agencies (table 4.1). The numbers of workers covered by the workers' compensation program and the numbers of first reports of injuries vary by a factor of 20 between the largest state (California) and the smallest jurisdictions (the District of Columbia and Nevada). The amounts of benefits for which the workers' compensation agencies are responsible to insure accuracy of payments are at least 10 times greater in California than in the District of Columbia, Nevada, and Wisconsin. The resources allocated to the workers' compensation agencies to perform the administrative functions also vary considerably among the 10 jurisdictions. The figures for Ohio and Nevada are not comparable to those in other jurisdictions since the staff and budget figures include resources devoted to administering their exclusive state funds. The New York staff figure is not entirely comparable since the personnel who administer the nonoccupational disability benefits program are included.[1]

The number of staff members per million covered workers and per thousand first reports are shown in the final columns of table 4.1. Nevada and Ohio have the highest ratios—reflecting the responsibilities of administering exclusive state funds. Among the other jurisdictions, Wisconsin stands out because of its low staff ratios—an impressive result in light of the state's reputation of excellence in administration. New York is distinguished by its high ratios—a consequence in part of its unique method of monitoring, in which each indexed case must be scheduled for a hearing before an administrative law judge prior to closing.

The balance of this section reviews the approaches to the procedural functions in the 10 jurisdictions and provides observations that represent inputs to a model for permanent disability benefit procedures.

Table 4.1
Administrative Burdens and Resources of the Workers' Compensation Agencies in Ten Jurisdictions

Jurisdiction	Covered workforce (millions)	First reports (indemnity cases)	Benefits paid 1984 (millions $)	Agency staff	Agency budget (millions $)	Number of staff members: Per million covered workers	Number of staff members: Per thousand first reports
California	9.800	408,000	2,687	816	37	83	2.0
District of Columbia	0.400	13,396	74	59	2.3	148	4.4
Florida	3.800	64,834	692	524	20.3	138	8.1
Michigan	3.290	74,045	630	197	6.6	60	2.7
Nevada	0.413	10,726	106	59[3]	25	1,446	55.7
New Jersey	3.825	37,794[2]	446	182	4.8	48	4.8
New York	6.600	174,620	857	1,627[3]	51.3	247	9.3
Ohio	4.625	101,315	1,121	1,383[3]	47.6	299	13.7
Pennsylvania	5.000	127,388	888	317	11	63	2.5
Wisconsin	1.920	61,499	239	84.5	3	44	1.4

SOURCES: Benefits Paid 1984 from Price (1987, table 2); other data from U. S. Department of Labor, *Administration Profiles* (1985).

1. Includes staff and budget for exclusive state fund.

2. Includes all reports filed, not just reports on indemnity cases.

3. Includes staff that administers nonoccupational disability benefits program.

Record Keeping

Ideally, procedures should place the least burden on the parties and agency consistent with fulfilling the system's objectives. If one of these objectives is the promotion of safety, the records should allow state agencies to examine the universe of work-related injuries. However, some states, such as Wisconsin and Michigan, receive reports only on potentially compensable cases. Accidental injuries in which the worker did not lose time beyond the waiting period or sustain a permanent injury will not come to their attention. On the other hand, efficiency considerations would require not placing an undue burden on the parties. New Jersey, which requires an employer's first report on all accidental injuries involving lost time, also requires an additional report on compensable cases. The purpose of the second report is not at all clear.

The parties ought not to be required to report the same information to more than one agency. The question of duplicate reporting brings up the relationship of the workers' compensation system to the rules and regulations of the Occupational Safety and Health Administration (OSHA). All employers covered by OSHA are required to fill out a form (Form 101 or an acceptable substitute) for "OSHA-recordable" cases. These include, in addition to lost time and permanent disability cases, loss of consciousness, restriction of work or motion, transfer to another job, and medical treatment other than first aid. Employers are not required to transmit OSHA 101 forms, but the forms must be kept on file and are the source of information for the employer's annual report to OSHA.

The very existence of OSHA may have engendered an attitude in some state administrators, and perhaps some employers as well, that safety has somehow become the concern of OSHA and the federal government and need no longer occupy the attention of the state workers' compensation agencies. To perpetuate such a notion would be to deprive the state agencies of one of their traditional and essential functions. To discharge these functions, the agencies should have not only knowledge of all work-related injuries and diseases, but also the capability of preparing reports and analyses to fulfill the objective of promoting safe and healthful working conditions in the state.

The problem always is where to draw the line. To require employers to send in the forms in all OSHA-recordable cases might involve a flood of "medical only" cases and complicate the administration of the entire program. The net is cast wide in the OSHA-recordable criteria,

and although it may suit OSHA's legislative purposes, it may result in a flood of forms coming to the workers' compensation agencies and discourage any meaningful analysis. In any event, none of the states under consideration here requires reports on all OSHA-recordable cases; all maintain the more traditional requirements of reporting on lost-time injuries or on some even narrower universe.

If the employer's first report is used not only for safety purposes but as the first document in the case file, there is an additional problem of confidentiality. The fear is sometimes expressed that if the document is used in case processing, employers will be less frank in recording the event, lest the information be used against them. Thus, in New Jersey and in California, where first reports are required on all cases, the analysis and the processing of these forms are not done by the same division that administers the workers' compensation statute.

More universally accepted than the safety objective is the objective of assuring the payment of adequate benefits promptly. For this purpose, the agency must be aware of all potentially compensable cases and of whether the first payment is being made within a reasonable time. In states where private insurance prevails, three general opening procedures can be identified. First is New York's unique system. The employer files a first report on all lost-time cases and agency personnel make the preliminary judgment as to whether compensation benefits will become payable. Such cases are indexed. The employer is notified and is required to respond to the notice of indexing by indicating payment or intent to controvert. Once indexed, a case cannot be closed without a hearing.

Second is the procedure in Pennsylvania, where the employer's first report on all lost-time injuries becomes the first document in the file. Within 21 days, the carrier submits another report indicating either payment or intent to controvert. Essentially the same system is followed in Wisconsin and Michigan, except that in these states the employer's first reports are filed only in potentially compensable cases. The third procedure is found in New Jersey, which calls itself a direct payment system state. There the employer must file a first report on all lost-time cases and then a form accepting liability and setting forth some details. But the second form does not report when the compensation payments are to be made, nor is any employer form routinely required if the case is controverted.

The Pennsylvania procedure places the least burden on the employer and employee consistent with the information the agency must have to discharge its functions. An employer's first report is filed in all lost-time cases; within a stipulated period, the carrier must give notice either that the employer will pay or that the employer will not pay; subsequently the carrier is required to file forms indicating any change of status; and at the close of payments, it must submit a final receipt of compensation. Further, the carrier must file annually for each open case a statement showing the compensation details and the amounts to be paid.

If the sole objective were assurance of benefits, the New York procedure would seem to be preferable. It can be criticized only on the grounds of efficiency; the resources used in conducting a final hearing or offering the opportunity for such a hearing in each case before closing might better be used elsewhere. The system also places a burden on agency personnel, who are required to decide which cases should be assembled and indexed. In the Pennsylvania procedure, the carrier is obligated to make this decision, to advise as to whether payments have begun, and, if they have not, to advise as to the reason for nonpayment.

Exclusive state-fund states have obviously different problems. Information is required on all work-related injuries that involve any type of expenditures, even for minor first aid cases. The fund must be advised on all items that will result in charges. In Ohio's exclusive state fund, detailed reports are required from employers before claims can be paid. In the case of Ohio self-insurers, however, the state's function is not to pay but to oversee payments, and reports are not required until such time as permanent partial disability is to be assessed.

Closing procedures in states are likely to differ not only because of the method of insuring liability, but also according to what criteria are used to assess disability—wage loss, impairment, or functional limitations. In New Jersey, where an assessment of impairment is the rule, the final report filed by the employer lists the percentage of disability and amount of benefits and some medical information, but it is not accompanied by a physician's report.

New York requires a physician's report on a periodic basis, in part because these reports are useful to the carrier to audit the treatment and the physician's fees. The physician is chosen by the employee in New York; in New Jersey the carrier has control over the choice of physician and the agency does not require physicians' reports.

In New York, the case cannot be closed without a hearing and consequently the agency has knowledge of the settlements reached in all cases. Even if the parties do not appear for a hearing, presumably the file information is sufficient for the agency to audit the adequacy of the payments.

To assure adequate payments to a worker where such payments are made voluntarily, the agency needs information on the amounts being paid, the reason they are being paid, medical condition, and the worker's current employment status. A further obligation of the agency is to audit and analyze these reports and take action on the basis of the information. Such considerations bring us to the next group of procedures, namely those having to do with the monitoring function.

Monitoring

The extent of monitoring that can be done in any state is crucially dependent on the type of records kept. Obviously, monitoring is difficult or impossible if no information is forthcoming from the parties. As we have seen, all states require some documents from interested parties. Most states review these documents as they come in, even if only to check the accuracy of the parties' computation.

The patterns of monitoring are quite different from state to state. In New York, all indexed cases are scheduled for a hearing, and monitoring is an integral part of the case processing. All cases presumably come under the scrutiny of an administrative law judge before they can be closed. Whether anything substantive is done in routine cases, which are handled at rates of more than 100 per day, and whether an individual judge can give very serious consideration to these cases is another matter. Nonetheless, there is at least some review.

New Jersey from time to time, depending on the availability of personnel, checks on the direct settlement made between the parties. The efficacy of such activity is dependent on the budget allocated to this process. Obviously, if the screening is entrusted to an untrained clerk, he will only be able to apply the mechanical criteria given him. On the other hand, if the screening is done by a trained administrator or physician, more significant questions might be raised as to the adequacy of the benefits paid. No field investigations are undertaken in New Jersey, and cases that are questionable can only be set down for a hearing.

Wage-loss states have other items to check. In Michigan, if payments cease and the worker is not back to work, the agency will investigate

the matter, sometimes on its own initiative. The use of an investigative staff by an agency is a relatively rare event, however, except in the exclusive fund jurisdictions. The more usual procedure when discrepancies are suspected is to notify the parties and schedule the case for a hearing. In some instances, however, the hearing officer may make a judgment that further information is needed and will initiate a request for further medical testimony.

Wisconsin takes an active interest in pending cases. Formal checks of computational accuracy are made in mechanical fashion, but the agency also follows through, telephones the parties, and in general is willing to investigate questionable situations.

Another method of monitoring, used in Wisconsin and Michigan among other states, is to provide information to the employee on a routine, regular, and continuing basis. In both states, the worker is sent copies of forms so that he can check on what the employer has reported. In Pennsylvania, copies of the first reports are given to the injured employee and the reverse side of the copy lists his rights. Notices of the compensation payable must be sent to the injured employee by the carrier, and, in general, the employee is kept informed of developments in his case.

The concept of monitoring carrier performance is not appropriate in the exclusive fund states. The workers' compensation agency pays benefits and, of course, must keep a constant check on what is happening in the case so as to decide whether or not particular benefits are justified.

In California, each employer that voluntarily begins payments of compensation is supposed to file a form setting forth the basic information about the claim. Similarly, a form is supposed to be filed at the end of the case. Not all employers abide by the requirement for the first form and fewer still comply with the requirement for the final form. California has adopted a computerized system of monitoring these forms. Each goes through a basic editing process and obvious errors are spotted by the computer check. The system appears to be capable of efficient superficial checking of forms that are filed; it fails, however, to systematically check as to whether such forms are filed in the first place.

It is wasteful and inefficient to audit forms and then do nothing further. The objectives of monitoring, which may be to assure that the law is being administered in an equitable fashion or to provide reliable

information to improve the administration of the law, must be clearly specified. Whatever the purpose, it is worthwhile to follow up on cases flagged for attention. In Wisconsin, employers and insurance carriers know that if their forms are not complete, or if they have deviated from established procedures, the matter will be called to their attention by a phone call, a letter, or other means. Because the administrators care about information that comes in, those who forward material are careful about what they send.

The monitoring function requires a type of administrative talent that is not always found in the state agencies, with their sharp division of personnel between clerical employees on one hand and hearing officers on the other. The monitoring function requires one or more investigators charged with following up flagged cases to see that the appropriate information is forthcoming, and to assure that the worker receives his rights.

The line between monitoring and our next category, "evaluation," is a thin one. By monitoring, we mean to include all activities deigned to provide information to the employee and to advise the parties of their rights in an attempt to deliver benefits equitably, quickly, and without litigation when no genuine dispute exists. All monitoring activities depend upon information coming from the parties and, hence, on a good record keeping and data system. Once in effect, an efficient system would audit these forms in the least-cost manner; in a larger state, auditing to check on the accuracy and completeness of the information can be computerized.

The second element of a good monitoring system is providing information and advice to the employee so that he is aware of what the employer intends to do and the basis for the action. Obviously, excessive monitoring can result in a paternalistic system. The agency should keep the employee informed about his rights and about the significance of the actions of the employer under the law; whatever actions the employee takes (or fails to take) normally are his own choice, although in some instances the agency may need to override the decision.

The third element of a monitoring system is to take active steps—field investigations to learn the facts in questionable cases, concerted attempts to advise the parties of their rights under the law—to avoid unnecessary litigation. One way to work toward this end, obviously, is to provide criteria for the evaluation of the permanent partial disabilities.

Evaluation

What procedures have been set up to allow the parties to evaluate permanent partial disability? If an employer seeks to pay permanent partial disability benefits voluntarily, can he arrive at the amounts that ought to be paid by complying with these procedures? If he does comply, does he have any assurance that the payment will dispose of the matter without further litigation?

Possibly the most developed evaluation procedures are California's. On request, the permanent disability rating bureau prepares an informal rating for a permanent disability case. If both parties accept the rating, payment of compensation due may begin without further procedures. The informal rating has no legal significance unless the parties voluntarily accept it. It does not constitute evidence of the existence of permanent disability or of the factors of disability. Available evidence suggests that the informal rating is most effective in the resolution of cases involving minor injuries. The more serious injuries are almost always the subject of disputed cases. It may have been hoped that California's rating system would assure objective disposition of cases, but the fact is that litigation has become the rule rather than the exception in California. The fault may be with the subjective nature of the criteria used in the state.

New Jersey's procedure at the informal hearing level bears some resemblance to California's rating procedure, but the differences are significant. The employer in New Jersey can begin to pay permanent partial disability benefits without securing any rating from the agency. It may, however, bring the matter to the informal level, a procedure that is voluntary on the part of both employer and employee. The referee's recommendation, made after hearing both sides, has no legal significance, but if accepted by both parties, it may be the effective end of the matter, with the employer filing a final report on the case.

In Ohio, an exclusive-fund state, a separate section of the Commission evaluates all applications for permanent partial disability benefits. The evaluation may be based on medical information in the file or the section may order an examination by a medical specialist.

The wage-loss states have no specific evaluation procedures. Evaluation of impairments and function limitations is confined to schedule-type injuries. An issue that arises more commonly in permanent partial disability cases is the question of whether an employee is able to return to his work, or to other work that is available to him.

In the scheme by which we have chosen to describe workers' compensation procedures, evaluation procedures lie between monitoring procedures (designed to insure that the law's objectives are carried out) and adjudication procedures (governing the settlement of disputes), inasmuch as they are concerned with allowing the parties themselves to settle on the amount and type of permanent partial disability benefits. If the state discourages any voluntary payment of these benefits until agency personnel have had an opportunity to rate the extent of the impairment, evaluation is close to monitoring. And to the extent that evaluation procedures substitute for adjudication, such as in the informal hearing or rating bureau procedures, evaluation becomes almost the first step in the adjudication procedures.

Even were there a perfect and universally accepted set of objective criteria with which to evaluate cases, there would remain the question whether it is necessary to have each and every case come before some tribunal or bureau of the state workers' compensation agency or whether workers need appear personally in order for their cases to be evaluated. In California, workers need not make a physical appearance at the rating bureau. The initial rating is done on the basis of medical information and forms filed by the employer, which include input from the employee. In Nevada, although it is unnecessary for the worker to appear at a hearing, a high percentage of all but the most trivial of the permanent partial benefit cases do appear before a referee for evaluation, which usually entails an examination of the employee by the state doctor.

The ideal criteria would be sufficiently clear and objective to allow the parties to comply with evaluation procedures and determine the benefit amount. Such determination could be reviewed by the agency, and only settlements that fell outside acceptable bounds would be adjudicated on the agency's motion. Whatever the ideal, the fact remains that a high percentage of cases in most states are decided on a controverted level. Each state has some provision for the adjudication of disputes.

Adjudication

Broadly speaking, the adjudication procedures of the states examined in this study are very similar. An exception is New York, in which all cases must be considered at some point by an administrative law judge (ALJ). But in New York, the adjudication procedure often begins after the ALJ's decision, when one of the parties appeals the decision to the Board.

In general, however, all contested cases begin with some type of a petition, followed by a pretrial conference, a hearing before a hearing officer, and then possibly an appeal from that hearing officer's decision.

Efficiency considerations require that adjudication procedures be used only after voluntary settlement procedures have failed. Controversy should be a last resort, and efficient procedures would allow the parties to present all their evidence fully and completely at a hearing before a competent trier of the facts. An appeals procedure would then be reserved only for the unusual case in which new and important issues are raised, or in which proceedings at the lower level are deficient.

Adjudication procedures do, of course, vary from state to state. In New Jersey there is a hearing before a judge of compensation, who operates in a fairly formal capacity and whose decision can be appealed only to the state court system. By contrast, in Wisconsin there is a less formal hearing before an attorney-examiner, with appeals to a review commission of the department in which the compensation agency is located, and from there to the court system.

In Ohio, the Commission's rulings concerning the extent of disability cannot be appealed, but other matters may be appealed to the courts, where the case may be heard *de novo* and possibly before a jury.

Differences among the states in their adjudication procedures reflect in large part the differences among state constitutions and court systems. It would be most difficult and probably not worth the effort to standardize adjudication procedures. The ideal procedures, however, would seem to require a full hearing at some stage before a hearing officer with an appeals step within the Commission. Such a decision should be dispositive of the facts, with appeals to the court system confined to interpretation of law, with findings of the fact supported if the courts find that they are based on substantial evidence.

Summary and Conclusions

We have accepted the National Commission's emphasis on the importance of the delivery system, seconding its plea for an active administrative agency that concentrates on administrative functions other than adjudication. Our concern has been with agency procedures involved in the processing of claims for permanent partial disability benefits. We have not examined all aspects of administration, but have taken many of the factors as given. We recognize that the particular

insurance arrangements in effect, the civil service structure, the type of compensation system, and a great many other variables affect administration. Our focus has been on the administrative procedures of the state agency to the exclusion of the claims management functions entrusted to the insurer. We have adopted a fourfold classification of administrative functions involved in processing permanent partial disability cases.

The Record Keeping Function

An efficient delivery system requires record keeping for several purposes. The record keeping function furthers all of the basic objectives of the modern workers' compensation program. Without adequate knowledge of what is happening to all workers who become injured in the state, the agency will not be able to determine whether the program provides for broad coverage of employees with work-related injuries or diseases. Without knowing what happens to workers who become involved in industrial injuries, administrators will not be able to determine whether the system provides substantial protection against interruption of income. Without adequate reporting, it will not be able to tell whether provisions for medical care and rehabilitation are adequate; and, of course, without reporting from employers of the wide range of injuries and illnesses that are work-related, it will not be able to fulfill the objective of encouragement of safety.

Desirable though it would be to possess complete information, it is clear that in a world of limited resources most agencies must live with an information system that has obvious gaps. California has good information about the nature and type of all lost-time injuries in the state, but not about their consequences. In Wisconsin, the agency's field of vision is restricted to compensable injuries and illnesses, but for these the system develops considerable information about the types of injuries involved and the benefits paid. Both systems have defects and advantages. Pennsylvania's example shows that it is possible to have both extensive reporting of injuries and illnesses and a system that follows what happens in compensable cases.

No state has an ideal system, but pieces that could be assembled into a nearly ideal system are scattered throughout various states. It remains to bring them together and to convince the states that doing so will be worth the cost. Unfortunately, as of this writing no such eclectic design has (to our knowledge) been seriously advanced; nor are the data forthcoming that would allow for a cost-benefit analysis.

The Monitoring Function

To discharge its obligations to further the objectives of the program, a state agency must monitor the activities of the principal actors in the system. It must have sufficient information to act promptly in cases where the letter and the spirit of the law are not complied with. It must routinely monitor the system so that workers are guaranteed substantial protection against interruption of income and so that sufficient medical care and rehabilitation services are assured.

The monitoring function can range from mere checks on the correctness of arithmetic calculations to a thorough follow-up of cases. It will vary among states according to the type of law; according to the obligation of the carrier either to pay a claim or controvert, or to delay payment until after some formality; and according to the type of notice, if any, the payer must file before payments are suspended. As with the other administrative functions, much will depend on whether the agency adopts an active or passive stance. Fears of acting too paternalistically may prevent a state from adopting an active role in the monitoring function. If the agency detects something amiss, it may limit itself to scheduling a hearing and allowing the parties, if they choose, to protect their own interests.

The monitoring function can be carried out to further the program's objectives without the agency acting in an excessively paternal manner and without displacing the legitimate functions of the legal profession. As with the other categories, we cannot point to one jurisdiction as having the ideal system, and we recognize that any system, to be pronounced perfect, must pass the economic test. We can, however, suggest an eclectic system based on our examination of all 10 states.

Once a workers' compensation program grows to the point that it receives thousands of reports annually, computerization of routine procedures may be worthwhile. Computer programs are admirably suited to checking on completeness of forms, auditing computations, and conducting simple logic checks. It does not take a sophisticated program to determine when a date is omitted, when the weekly compensation rate times 10 weeks comes to less than 10 times the rate, or when the date of injury occurs after the date of first payment. Assigning such checks to a computer can free personnel for a more meaningful audit of reports.

Once potential errors are discovered, some method of rectifying them must be set into motion. An ideal monitoring system would provide a budget for phone inquiries and for field investigations. The carriers discharging their claims processing functions in a timely fashion deserve plaudits; those deficient should have their shortfalls called to their attention.

Clearly, it is not paternalistic for the worker to be kept advised of the status of his claim at all stages. An ideal monitoring system is dependent on a system of records on one hand and, on the other, a system of evaluation that affords the parties some guidance.

The Evaluation Function

The evaluation category encompasses all administrative functions designed to provide guidance to the parties in their evaluation of the nature and extent of permanent disability. Unlike some of the other categories of administrative procedures, in the case of evaluation, the particular type of procedures used may be less important than whether the agency has promulgated any guidelines to aid the party in making such determinations.

As the system now operates, the rating of a particular person's disability or impairment depends on judgmental factors, but variability can be reduced if the agency is able to provide guidance to the parties—a feat that obviously requires the formulation of standards and an active administration to promote them.

The evaluation functions can be performed in a number of ways, but if they are neglected, the result will be extensive litigation, with each case being decided on an *ad hoc* basis and with the inevitable possibility of uneven and inequitable treatment. Our examination of the evaluation procedures is developed in subsequent chapters. Whether these procedures are carried out by means of an agency rating bureau or by the promulgation of general guidelines, the assertion of interest by the agency in these matters and the requirement that settlements be made to conform to some uniform standard would go far toward the achievement of equity.

The Adjudication Function

Adjudication remains an inevitable characteristic of the administrative system of state workers' compensation agencies. Unfortunately, in many

state agencies, the greatest part of the administrative energy and resources goes into discharging the adjudication function.

The claim petitions must be docketed and served on the appropriate parties. Strict controls must be kept over contested case files whose contents may be subject to subpoena. Due process requires notice to the parties. Hearing officers' time must be scheduled; decisions and opinions must be typed and sent to the parties. Appeals must be dealt with within legally specified time limits. Transcripts may be taken at hearings, and these must be preserved and distributed. The procedures are, of necessity, regularized, but they must give due attention to the legal rights of the parties. Care is also necessary because deficiencies in procedures may cause reversals of decisions at appellate levels.

The care and attention given to these adjudication procedures serve as a standard that should govern the record keeping, monitoring, and evaluation functions. It is understandable that when budgets are limited, adjudicative functions receive priority. But to the extent that the other functions are neglected, the adjudicative role becomes more necessary, extensive, and expensive.

Record keeping, monitoring, and evaluation are complementary functions. To monitor effectively requires records, and the standards that are monitored largely come from the evaluation function. But these three categories of administrative functions may substitute for some adjudicative activities. To the extent that funds for the records, monitoring, and evaluation can be found, adjudication funds might be saved. If the parties know what to do (evaluation), if they believe that what they do is a matter of concern (monitoring), and if the agency has knowledge of what they do (record keeping), to that extent, disputes (adjudication) should be minimized. The contested forum can then be reserved for genuine disputes, in which novel issues are explored and new directions taken.

NOTE

1. The annual budget of the New York State Workers' Compensation Board of $56,580,700 includes $5,258,300 to administer the nonoccupational disability benefits program (U.S. Dept. of Labor, *Administration Profiles*, 1985, p. 238). A similar breakdown of staff is not provided, but the budgetary division suggests that most Board personnel are involved in administering the workers' compensation program.

Chapter 5
Scheduled Benefits
Scheduled Versus Nonscheduled Injuries

The essential task of the workers' compensation program is to pay appropriate benefits to injured workers. In this chapter, we explore the criteria used for deciding on appropriate benefit amounts in cases involving scheduled injuries of a permanent and partial nature. In chapters 6-9 we deal with the nonscheduled, permanent partial injuries.

As is often the case in describing workers' compensation programs, the terms "scheduled" and "nonscheduled" are not used in a uniform and unambiguous fashion. The statutes in most states contain a schedule that lists the number of weeks or dollar amounts of compensation benefits to be paid for the physical loss or (in most jurisdictions) the loss of use of specified parts of the body. In addition to listing the upper and lower extremities (the arm, leg, hand, foot, fingers, and toes), states commonly schedule benefits for the enucleation of an eye and for the loss of hearing and vision. Disfigurement is also specifically mentioned in some statutes, usually without specific guidance as to how it is to be rated. We define a *scheduled* injury as any injury that is specifically enumerated in the workers' compensation statute.

Injuries to the trunk, internal organs, nervous system, and other body systems are not usually included in the lists of injuries found in the statutes, and we define these injuries as *nonscheduled*. (In some states, they are referred to as "unscheduled" injuries.)

The distinction between scheduled and nonscheduled injuries can be related to the possible consequences of an injury or disease illustrated in chart 1.2 and discussed in chapter 1. The worker who suffers the physical loss of a part of the body included in the schedule is evaluated in terms of the seriousness of his or her impairment. Thus in a state that equates the loss of an arm with 250 weeks of benefits, a worker who loses half of an arm by amputation will be entitled to 125 weeks of benefits. An injury that leads to the loss of use of a body part found in the schedule is evaluated in terms of the extent of functional limitations that result. Thus in a state that equates the loss of a hand with 100 weeks of benefits, a worker with an injury that causes a 50 percent

loss of use of a hand will receive 50 weeks of benefits. Most states pay scheduled benefits if the worker experiences either a physical loss or a loss of use of the body part found in the schedule, but there are some states that confine scheduled benefits to amputations as opposed to loss of use.

There are three general approaches to nonscheduled injuries that can also be related to the conceptual framework found in chapter 1. (Most states use only one of these approaches, although, as we will discuss in subsequent chapters, there are exceptions.) The first approach to nonscheduled injuries evaluates them in terms of the resulting impairments or functional limitations. For example, a worker may experience structural damage to a vertebra and the spinal column, which are injuries usually not found on the schedule. The impairment itself may be evaluated (the disc is herniated) or the consequent functional limitations may be assessed (the worker is restricted in his ability to lift, stoop, or make certain motions that he was able to make before the injury). This first approach usually produces a rating in percentage terms that relates the worker's condition to that of a whole man (or to a "totally disabled" person). Thus in a state that equates a whole man to 500 weeks, a worker with an impairment rating of 25 percent would receive 125 weeks of benefits. The states that use the impairment approach to nonscheduled benefits are our category I states, and are examined in chapter 6.

The second approach to nonscheduled injuries evaluates them in terms of the loss of earning capacity. In states that use this approach (category II states, discussed in chapter 7), an assessment of the seriousness of the worker's medical condition, in light of such factors as the worker's prior education, work experience, and personal characteristics, is used to yield a rating in percentage terms of the loss of earning capacity. Thus in a state that defines a total loss of earning capacity as equivalent to 600 weeks of benefits, a worker with a 33 1/3 percent loss of earning capacity would receive 200 weeks of benefits.

The third approach to nonscheduled benefits is the wage-loss approach, which requires the worker to demonstrate that he has experienced an actual loss of earnings because of the work-related injury or disease. The states using the wage-loss approach (category III states) are examined in chapters 8 and 9.

The typical workers' compensation statute, then, distinguishes between scheduled injuries, which are listed in the statute and evaluated

according to the resulting impairments and functional limitations, and nonscheduled injuries, which are evaluated in terms of impairment, loss of earning capacity, or actual wage loss. A few jurisdictions are atypical. In California, for example, the statute does not contain a list of injuries with corresponding benefits; i.e., there is no statutory schedule. However, the California workers' compensation agency issues a set of guidelines for evaluating injuries that encompasses all types of injuries, without the typical scheduled-nonscheduled distinction found in the statutes of other jurisdictions. The California guidelines are also unique because, depending on the injury, the basis for the rating can be impairment, functional limitations, or loss of earning capacity. Although California does not neatly fit into our taxonomy, we will examine the California treatment of those injuries that are normally scheduled in this chapter, and then reexamine California as an example of the category II approach to nonscheduled injuries in chapter 7.

Nevada, too, defies our classification scheme. As in California, Nevada's statute includes no list of injuries. Rather, all injuries are evaluated by use of the American Medical Association's *Guides to the Evaluation of Permanent Impairment*. In terms of the conceptual approach provided in chapter 1, the *Guides* evaluate injuries in terms of the resulting impairments and functional limitations. We treat Nevada in this chapter for those injuries that are typically scheduled; in the next chapter, Nevada is viewed as exemplifying the category I approach to nonscheduled injuries.

A final matter requiring discussion before we turn to an intensive examination of scheduled injuries is the question of whether a given injury can be compensated under more than one approach. In most states the schedule is "exclusive," that is, an injury that qualifies for scheduled benefits cannot qualify for any other type of permanent disability benefit. (An injured worker may qualify for temporary disability benefits during the healing period that are paid in addition to the scheduled benefits, and still meet our definition of "exclusive" benefits.) In some states, however, a worker who qualifies for scheduled benefits may also qualify for some other type of permanent disability benefits; such scheduled benefits are "nonexclusive." One state with nonexclusive benefits is New York, where workers with scheduled awards based on loss of at least 50 percent of the arm, hand, leg, or foot can qualify for a type of wage-loss benefit if they are still experiencing losses of earnings due to the injury when the scheduled benefits expire. Another example is Florida, where the limited scheduled benefits included in the 1979 law

can be paid in addition to wage-loss benefits for the same injury (assuming the worker is experiencing an actual loss of earnings).

History of the Schedule

Arthur Larson (1986, sec. 57.14), in tracing the history of the schedule in workers' compensation, identifies the fundamental rule of liability: normally a fixed amount of compensation is paid for a particular type and severity of injury, regardless of actual wage loss. Larson recognizes that the rule cuts both ways. A worker may receive a scheduled benefit in the absence of any permanent wage loss. Conversely, he may suffer a continuing wage loss in excess of the time specified on the schedule. Larson notes that this rule was never universal and has been giving way to both judicial and legislative assaults. Despite these exceptions, the fundamental rule of liability is so pervasive that a review of its historical origins is warranted.

Ancient Precedents

A generation ago, Babylonian law, which was codified in the reign of Hammurabi, was rediscovered for the modern world. Hammurabi's code represented some amelioration of more primitive customs, because it partially substituted compensation for retaliation. Also, the principle of *talion*, a punishment identical to the offense, however brutal it might have been, at least precluded retaliations that exceeded the severity of the original offense. The code of Hammurabi includes both specified money payments for particular injuries and more direct "eye for an eye, tooth for a tooth" penalties, with the choice dependent upon the relative social ranks of the aggressors and the victims.[1]

In Hittite law, penalties, fines, and punishments were reduced, and the previous talionic and corporal penalties replaced by compensation. Punishment of the offenders became almost secondary to reparation for the damage done (Neufeld 1951, p. 99).

In the Hebrew Bible, although the law of retaliation—the measure for measure—is quoted, nonfatal physical injuries became a matter for monetary compensation to the injured party. The general rule was that these ought to be equitable and, as far as possible, equivalent. The rules allowed compensation for a good deal more than wage loss (Falk 1964, pp. 83-84) and can be considered the predecessor of tort law and nonscheduled injury awards as much as the forerunner of the schedules.

A clear illustration of how compensation replaced retaliation is found in Exodus (21.18-19):

> And if men contend, and one smite the other with a stone, or with his fists, and he die not, but keep his bed; if he rise again and walk abroad upon his staff, then shall he that smote him be quit; only he shall pay for the loss of his time and shall cause him to be thoroughly healed.

The commentaries explain that compensation is awarded on five grounds: for damage, for pain, for healing, for loss of time, and for insult. Insult apparently refers to payments made when the harm was intentionally inflicted. The liability for healing extended to payment of medical costs; the commentaries are quite specific as to when liability ceases, and under what conditions the case may be "reopened," to use the modern phrase.[2]

Payment for damages was assessed in a way that is not possible in the absence of a slave market. The instructions were to consider the injured person as if he were a slave to be sold in the market, to appraise his price before the injury, and to contrast that price with what he would be worth with the impairment. Obviously, in a perfect market the difference would be the present value of the future net product of the whole slave, as contrasted with that of the impaired one. With the examples at hand (a slave market), these capitalized values could be observed, rather than estimated by probabilistic functions dependent upon imperfect knowledge of future earning streams.

Another of the five grounds was liability for loss of time. The rabbis recognized that the injured man had already been paid for the value of his foot or leg, and consequently the amount paid for loss of time was estimated at a minimum wage—"as if he were a watchman over a cucumber field," neither an onerous nor a dangerous occupation. The duration is not clear from the commentaries. Was it payment for the healing period or "temporary total disability" in modern terms? Or was it an extended wage-loss benefit after payment of compensation for the impairment? A footnote to the commentaries implies it was the latter, and that wages of the simplest task were chosen since the injured often may have been fit for no other kind of work. It goes on to say that "in actual practice the court must take into consideration what services he will be fit to give after he has been completely cured." The ambiguity remains since the same footnote also states that compensation for lost time must be paid even in the absence of bodily injury.

Since the scheme was general, and not one of "liability without fault," the last of the five grounds was for "pain." The amounts awarded depended upon the amounts a person "would be willing to accept to suffer so much"—a startlingly modern formulation.

People in similar stages of civilization develop similar concepts to deal with such matters, but how these concepts survive, and through what transmutations, is difficult to trace. Certain developments cannot be traced on a straight upward line; retrogression and advance both take place, and it is not easy to distinguish between them. It is claimed that the Egyptian Bedouin, until quite recently, had a set of fixed payments for assaults and wounds, dealing respectively with loss of limbs, broken bones, wounds on the face, and wounds elsewhere on the body. A hereditary assessor determined the amount payable in each case in order to avoid talion or some sort of revenge (Driver and Miles 1960, pp. 408-9).

By the time the Anglo-Saxon world begins to leave its record, money reparations as a substitute for clan vengeance seem to be the rule. A definite schedule of tariffs established the official money worth of all persons, gauged principally by their rank (Malone 1970, p. 2). Thus the biblical notion specifying a definite amount for a specific injury, independent of rank, was lost sight of as status distinctions came into play.

Disfigurements, which are included in some modern schedules, were also included in the earliest laws. Malone (1970, p. 2) quotes the laws of Ethelbert to illustrate his point that the amount of tariff to be paid was determined to a large extent by the public shame that attended the wound: "If the bruise be black in part not covered by the clothes, let bot be made with thirty scaetts. If it be covered by the clothes, let bot be made for each with twenty scaetts." Such pronouncements sound much like current provisions of state compensation statutes, which specify dollar amounts due for highly visible scars but often leave less obvious scars uncompensated.

Malone cites the reference by Pound (1914, p. 198) to a pronouncement of the Welsh king, Howell the Good, that a scar on the face is worth six-score "pints," while the permanent loss of both joints of the thumb (an injury that would virtually disable the hand) brought only seventy-six "pints" and a half-penny. Thus even in the earliest times there was no ready social consensus as to the relative value of the consequences of one injury versus those of another.

We can find no organic connection between these ancient and primitive valuations and modern-day compensation schedules. The practice of levying fixed sums to compensate victims for specific injuries apparently disappeared, perhaps because of the lack of flexibility, or perhaps because the sums became unrealistically large and paid no account to the offender's ability to pay (Pollock and Maitland 1895, Vol. II, pp. 459-60).

The development of the criminal law substituted a more sophisticated method of social control, and in civil suits money damages were awarded when harm was inflicted, at first in accordance with strict liability and later according to negligence principles. Thus in the late nineteenth century, courts proudly declared that the law does not attempt to fix any precise rules for measuring damages, but "from the necessity of the case leaves their assessment to the good sense and the unbiased judgment of the jury."[3] "There can be no fixed measurement of compensation," wrote the Supreme Court in a late nineteenth century railroad case, "for . . . the permanent injury to health and body."[4]

Of course, it was the very dissatisfaction with these jury awards and the uncertainty attendant upon the tort law standards that helped persuade legislatures to adopt the first compensation statutes. The aim was to eliminate negligence concepts and substitute the concept of liability without fault. Liability was to be limited and the search was for definite rules to govern the determination of compensation benefits.

European Experience and Early State Laws

American state workers' compensation laws were influenced heavily by European experience. Germany's workers' compensation statute in 1884 was followed by Austria's in 1887. Sixteen other European nations, as well as South Australia, Queensland, and the Cape of Good Hope, had followed suit (between 1894 and 1907) before the first American act appeared (Larson 1986, sec. 57.13).

By 1913, the Bureau of Labor Statistics could report that no subject of labor legislation had gained such general acceptance throughout the world in so brief a period. Forty-one foreign countries, including all European countries except Turkey, had introduced some form of workers' compensation for industrial accidents. In the United States, the U.S. Congress passed a law in 1908 granting certain of its employees the right to receive compensation for injuries sustained in the course of employment. New York, Wisconsin, and Minnesota appointed com-

missions to formulate laws in 1909. Legislation was passed in Montana in 1909 and in Maryland and New York in 1910, but each of these laws was later declared unconstitutional. In 1911, Wisconsin became the first state to pass a state workers' compensation law that survived constitutional tests.

As Larson makes clear, most of these statutes did not contain schedules (1986, sec. 57.13). The New York law, for example, was modeled on the 1897 British act, which had a wage-loss provision for all permanent injuries. New Jersey's 1911 law is the first that contained a schedule from the beginning. New Jersey was the first state to adopt what Reede terms a flat rate disability schedule—"the only completely original element in American compensation scales." According to Reede (1947, pp. 117-18), the idea for the schedule was derived from the prevailing practice in private accidental and health insurance of paying specified sums for accidental dismemberment.

Dodd (1936, p. 617) maintains that the amounts specified for various types of impairments were influenced by jury verdicts in liability cases, schedules in accident policies, and legislative compromise between opposing interests.

Larson notes that schedules for compensation appeared in the United States well before the first state workers' compensation statutes: the first schedules were probably those of individual insurance policies, which began to appear in the second half of the nineteenth century.[5] Larson claims that Belgium's Industrial Accident schedule was closely associated with comparable compensation for war wounds, as was France's original schedule. It is his opinion that these historical fragments are of no use at all in explaining the origin of the fundamental rule of liability used for workers' compensation scheduled injuries—namely, the complete independence from actual wage loss within a program that justified benefits because of the existence of lost earnings (work disability, in our terminology). The schedules, especially the more limited schedules (such as Pennsylvania's early law, which was limited to major members), Larson notes, were tied in with the wage-loss rationale by the conclusive presumption of wage loss from major impairment. He contends that it was a realistic presumption, more obvious in earlier times than now because of the absence then of laws prohibiting employment discrimination. "The presumption that a one-armed or a one-legged worker would suffer eventual actual wage loss, then, was no fiction, nor was it a facade behind which to distribute payments for physical impairment" (Larson 1986, sec. 57.14).

New Jersey's example inspired the adoption of schedules in many other state workers' compensation laws. In 1912, Michigan, Rhode Island, and Maryland passed original statutes containing limited schedules; and a number of states whose original statutes had no schedules added them within a few years (Reede 1947, pp. 117-18). Ten jurisdictions had no schedules in their original acts: Arizona, California, Illinois, Kansas, New Hampshire, Ohio, Washington, West Virginia, Wisconsin, and Wyoming. By 1940, every state with a compensation law had a schedule of one sort or another.[6]

Of the 48 states in the union in 1940, only Arkansas and Mississippi were without workers' compensation laws. Of the remaining 46 states, 20 had exclusive schedules, which Reede defines as schedules under which payments represent the entire compensation with no attempt to differentiate the healing period, the permanent impairment, or any subsequent loss of earning capacity; and 22 states had schedules that Reede labels "additional," which show the number of weekly installments for permanent impairments to be paid in addition to compensation for total disability during the healing period. Maine, Massachusetts, and Rhode Island also had schedules of one kind or another, but Reede categorizes them apart from the other 42 states with workers' compensation.

Why did states follow New Jersey's lead? Reede (1947, p. 117) argues that the move was influenced, in part, by doubts about the effect of alternative plans on the worker's "will to recover" and, in part, by the difficulty of relating earning capacity at the wage level prevailing after the injury to earning capacity at the level prevailing at the time of injury.

California did not place a schedule in its statute, but authorized the workers' compensation administrator to issue a comprehensive schedule that measured disabilities as a percentage of the compensation awarded for total and permanent disability. The California schedule was borrowed from a Russian schedule, which listed 136 disabilities rated in terms of the percent of permanent total injury.[7]

The California schedule provided a standard rating for a wide range of injuries, and then adjusted that standard rating according to the occupation and age of the worker. In terms of our typology, California was basing its final award on some estimated measure of disability, since presumably the only justification for adjusting the standard rating according to age and occupation was that the same impairment or func-

tional limitation would have different economic consequences depending upon the age and occupation of the worker affected.

What is most significant for our purpose is that no state followed California's lead. It was New Jersey's schedule that served as the model for the other states. New Jersey's schedule differs from California's in the limited number of entries and in the absence of explicit adjustments for age and occupation. In the New Jersey schedule, each of the entries (the arm, the leg, and so on) is valued at a particular number of weeks. In the California schedule, all injuries are assessed at a proportion of the single figure allocated for total disability. That difference should not be too significant, in that it is always possible to translate the assessed number of weeks for a particular part of the body into a fixed proportion of the number of weeks allocated for total disability, and yet those schedules that do base all entries on a common denominator tend to be much more comprehensive. Again, the Russian schedule, from which the California schedule was borrowed, had over a hundred entries, in contrast to New Jersey's limited schedule. It is also apparent that when one begins to list more than the extremities and the eyes, it becomes necessary to evaluate loss of use. If internal injuries or injuries to the back are listed, it is clear that the initial assessment is based not on impairment, that is, a loss of the particular limb or the eye, but rather on a functional loss or limitation.

In addition to this basic difference in schedules among the states, there is today a difference as to whether the amounts awarded are wage-related. The statutes in all states but Massachusetts, Minnesota, Washington, and Oregon make awards by first fixing a number of weeks for a particular impairment or functional limitation, then multiplying that number by a weekly compensation benefit that is a specified percentage of the worker's preinjury wage, subject to a minimum and maximum weekly amount. In Washington, losses are valued as specified dollar sums, ranging in 1986 from $2,760 for the loss of a lesser toe to $36,000 for the loss of an arm or a leg. In Oregon, losses are valued in terms of degrees, with each degree of scheduled injury calling for $125 in compensation benefits. Thus the loss of an arm is valued at 192 degrees, or $24,000.[8]

The scheduled benefits in the few "deviant" states, such as Washington and Oregon, are obviously based on the philosophy that an arm is an arm, and worth the same amount to a lawyer or truck driver, a rich man or poor man. Larson (1986, sec. 57.17) maintains that such an assessment method is the only logical one if the reason for payments

is physical impairment. In the typical state, the loss of an arm is valued at a larger sum for a high-wage worker than for a low-wage worker. Presumably the reason for this method is that the sums are paid not to compensate for physical loss in and of itself (although that is the operational basis for benefits), but because, on the average, the low-wage worker will suffer a smaller future wage loss due to the impairment than will the high-wage worker with the identical impairment.

Many of the other differences in the schedules will be discussed as we make comparisons across states. It will be seen that state schedules differ in the specificity of their entries, and they also differ in the exclusivity of their awards. The latter difference among states has persisted to the present day. Most states pay benefits during the period of temporary disability, and in addition pay the scheduled benefits. In four states, the compensation for temporary disability is deducted in its entirety from the allowance for scheduled injury, and in four other states there are restrictions on the number of weeks of temporary disability benefits that can be subtracted from the duration of the scheduled awards.[9] Also, in a few states, it is possible to collect benefits after the scheduled number of weeks are paid, whereas in most states the payment of the scheduled number of weeks constitutes the full and complete payment, and is not supplemented in the absence of a change in the worker's medical condition.

Consistency of the Schedules

Durations

In the literature on workers' compensation, perhaps nothing is more frequently remarked than the extreme variations across states in durations or amounts of benefits for the same loss. In terms of number of weeks, for example, table 5.1 shows the range for the arm is from 225 weeks in Ohio to 500 weeks in Wisconsin. Comparable differences in durations for other parts of the body are also shown in the table.

Internal Consistency

Granted that the durations of benefits for any specified loss differ widely among states, we can also ask whether there is internal consistency within the states.

In table 5.2, we have set the duration of benefits for the arm in each state equal to 100. Other entries in a state's schedule are expressed as a proportion of the duration for the arm in that state. For example, in

Table 5.1
Number of Weeks of Cash Benefits Paid for Parts of Body, January 1, 1986

State	Arm	Hand	Thumb	Other fingers: 1st 2nd	Other fingers: 3rd 4th	Leg	Foot	Great toe	Other toe	Sight one eye	Hearing one ear	Hearing both ears
California	421.25	311	54.25	24 24	18 18	461.25	241.00	30.25	6	150.75	45.25	311
D.C.	312.00	244	75.00	46 30	25 15	288.00	205.00	30.00	16	160.00	52.00	200
Florida	Benefits paid in lump sum based upon AMA *Guides* for percentage of disability of whole man.											
Michigan	269.00	215	65.00	38 33	22 16	215.00	162.00	33.00	11	162.00		
Nevada	Benefits paid for 5 years or to age 70 (whichever is later) based upon AMA *Guides* for percentage of disability of whole man.											
New Jersey	330.00	245	75.00	50 40	30 20	315.00	230.00	40.00	15	225.00	60.00	200
New York	312.00	244	75.00	46 30	25 15	288.00	205.00	38.00	16	160.00	60.00	150
Ohio	225.00	175	60.00	35 30	20 15	200.00	150.00	30.00	10	125.00	25.00	125
Pennsylvania	410.00	335	100.00	50 40	30 28	410.00	250.00	40.00	16	275.00	60.00	260
Wisconsin	500.00	400	160.00	60 45	26 28	500.00	250.00	83.33	25-2nd 20-others	275.00	55.00	330

SOURCES: U.S. Department of Labor, Employment Standards Administration, *State Workers' Compensation Laws* (January 1986), table 9; U.S. Chamber of Commerce, *Analysis of Workers' Compensation Laws* (1986), chart VII; statutes for various jurisdictions.

California pays lifetime benefits for disabilities rated between 70% and 99.75% following the duration of the scheduled benefits. Durations shown are based on a standard rating prior to any adjustments for age or occupation.

Michigan: Amputation or loss of use of the arm must be less than 6 inches from below the elbow, otherwise it is a hand loss. Amputation or loss of use of the leg must be less than 7 inches from below the knee, otherwise it is a foot loss. **Pennsylvania** also compensates the loss of a forearm at 370 weeks. **Wisconsin** compensates the loss of an arm at the elbow at 450 weeks. The durations given for thumb and fingers are for losses including the metacarpal bone; the durations are different for losses at the proximal, second and distal joints. The loss of a leg at the knee is 425 weeks, and the durations for the loss of toes are given as including the metatarsal bone.

Table 5.2
Scheduled Compensation Payments as a Percentage of the Loss of an Arm, January 1, 1986

State	Scheduled compensation payments as a percentage of the loss of an arm										
	Arm	Hand	Thumb	First finger	Leg	Foot	Great toe	Other toe	Sight one eye	Hearing one ear	Hearing both ears
California	100	73.8	12.9	5.7	109.5	57.2	7.2	1.4	35.7	10.7	73.8
District of Columbia	100	78.2	24.0	14.7	89.7	65.7	9.6	5.1	51.3	16.7	64.1
Florida	100	89.1	32.0	16.4	63.6	41.6	7.3	1.8	34.5	5.5	54.5
Michigan	100	79.9	24.2	14.1	79.9	60.2	12.3	4.1	60.2		
Nevada	100	90.0	36.7	23.3	66.7	46.7	13.3	3.3	40.0	10.0	58.3
New Jersey	100	74.2	22.7	15.2	95.5	69.7	12.1	4.5	68.2	18.2	60.6
New York	100	78.2	24.0	14.7	92.3	65.7	12.2	5.1	51.3	19.2	48.1
Ohio	100	77.8	26.7	15.6	88.9	66.7	13.3	4.4	55.6	11.1	55.6
Pennsylvania	100	81.7	14.4	12.2	100.0	61.0	9.8	3.9	67.1	14.6	63.4
Wisconsin	100	80.0	25.0	12.0	100.0	50.0	16.7	5.0	50.0	11.0	66.0
Average		80.3	25.3	14.4	88.6	58.5	11.4	3.9	51.4	13.0	60.5
Standard deviation		5.46	6.17	4.37	14.68	9.45	2.93	1.32	11.96	4.47	7.48
Coefficient of variation		0.068	0.244	0.304	0.166	0.162	0.258	0.343	0.233	0.344	0.124

SOURCES: U.S. Department of Labor, Employment Standards Administration, *State Workers' Compensation Laws* (January 1986), table 9; U.S. Chamber of Commerce, *Analysis of Workers' Compensation Laws* (1986), chart VII; statutes for various jurisdictions.

Nevada: Percentages are based on ratings from the AMA *Guides to the Evaluation of Permanent Impairment*.

Florida: Percentages are based on adjusted ratings from the AMA *Guides*.

New Jersey the duration of benefit payments for the loss of an arm is 330 weeks, and for the loss of the great toe, 40 weeks (table 5.1). When the arm is set equal to 100, then the great toe's "relative value" is 12.1 (table 5.2).

Since the hand is part of the arm and the fingers part of the hand, we expect fairly close correspondence among the relative values of these parts of the upper extremity, when calculated using the arm as the base. In general, the relative values show only moderate variation among states. For the hand, they range from a low of 73.8 in California to a high of 90 in Nevada, which derives its values from the AMA *Guides*. The average value of the hand relative to the arm is 80.3, and the standard deviation is 5.46. The coefficient of variation (the standard deviation divided by the average) is only .068.

If we were to set the leg equal to 100, instead of the arm, we would find a similar correspondence in relative values for the foot and the toes. Larger deviations occur in the comparisons between the two major members—the arm and the leg. California is the only state that sets a longer duration for the leg than for the arm. In two of the states, the durations are equal; and in the remaining seven jurisdictions, the duration for the leg is less than that for the arm. Florida assesses the leg at the lowest relative rate, assigning it only 63.6 percent of the duration allocated for the arm. Nevada also places a low value on the leg relative to the arm.

The Florida and Nevada low evaluations of the relative worth of a leg result from the states' use of the AMA *Guides* as the basis for rating permanent impairments. Henry Kessler, one of the formulators of the AMA *Guides*, argued that although injuries to the leg will, in general, cause a longer period of disability and absence from work than comparable injuries to the arm, the long-range prognosis for vocational rehabilitation is more favorable for leg injuries. "The activities of the leg are relatively simple and therefore more easily restored or duplicated" (Kessler 1970, p. 109). As Kessler sees it, the human leg has two major tasks: to support the trunk and upper body, and to achieve ambulation. The arm primarily acts as an auxiliary of the hand, which has the prehensile ability indispensable to carrying out basic vocational functions. Kessler's views as to the importance of the hand are also reflected in its relative valuation of 90 percent of the arm in the AMA *Guides*.

The relative valuations are influenced by basic differences in philosophy and judgment as to the importance of the extremities. Even this short discussion is suggestive of the difficulty of pricing any part of the body in an entirely objective, scientific way.

Specificity and Comprehensiveness

Subdivisions of Parts of the Body Listed. The typical schedule, which gives only maximum values for the complete loss of the extremity, does not define precisely any part of the body. This leaves the sometimes challenging task of determining ratings for partial loss of the member. Is the loss of a tip of the finger before the distal joint equivalent to the loss of one-third of the finger or one-half of the finger? Or is the loss of any part of the finger to be considered as the loss of the entire finger?

Both the degree of specificity of schedules and accompanying guidelines issued by the worker's compensation agency vary from state to state. Although most states are content with a bare listing in the schedule, with minimum detail, Wisconsin has 20 separate schedule listings covering the loss of the thumb, fingers, or parts of these digits. Four separate listings differentiate portions of the index finger alone. The loss of the finger at the distal joint in Wisconsin is valued as 25 percent of the finger; by comparison, in New York, it is taken as 50 percent of the finger. The loss of the first two phalanges in Wisconsin is defined as 60 percent of the finger; in New York it is viewed as the equivalent of the entire finger. The same range of values for partial loss occurs with the hand and the arm, or the foot and the leg.

More Than One Extremity Affected. Some schedules are explicit as to benefits due when more than one member is affected. In New York, if more than one part of the body is affected, compensation is to be awarded for each, and these awards are to run consecutively. It is recognized, however, that adding together the scheduled values may exceed the value for the next highest specified loss in the schedule. Thus, in New York, the loss of two or more fingers is proportioned to the loss of the hand, but the total duration may not exceed that which is scheduled for the loss of an entire hand.

In Wisconsin, if two fingers on the same hand are lost, the award for the first equal or lesser valued finger is increased by 100 percent; if three fingers are lost, the award for the second and third equal or lesser valued finger is increased by 150 percent. The same type of adjustment is provided in the case of toes, although at only a 20 percent

rate, an amount that applies in all other cases that are not specifically mentioned in the multiple injury variation portions.

There is very nearly a perfect split of opinion among the states as to the relation of the combined value of the fingers to the value of the whole hand. Fratello (1955, Exhibit D1) compared the schedules of 39 states. In 19 of them, the sum of the values for the five individual fingers is less than the value of the hand; in 2 it is the same; and in the remaining 18 it is greater.

Combinations of impairments are also difficult to evaluate when unrelated parts of the body are involved. Most state schedules do not specify the durations for such combinations. Texas is an exception: it specifically schedules the loss of an eye and leg, the loss of an eye and hand, and so on. Some statutes presume permanent total disability in the event of multiple major losses. Michigan, for example, defines as total permanent disability the loss of any of the two members or faculties among eyes, legs, or arms.

Comparing Benefits Across States

Percentage of Wages and Weekly Maximums

Thus far, our discussion largely has been in terms of duration of benefits for various specified losses. Obviously, a person who loses an arm must be concerned not only with the duration of benefits, but with the amounts he receives. Table 5.3 shows the maximum weekly rates paid for permanent partial as well as the maximum rates for temporary total disability in 10 jurisdictions.

As seen in table 5.3, the District of Columbia, Michigan, and Pennsylvania pay the same maximum rate for temporary disability as they do for permanent partial. The other states have different maximums for permanent partial and temporary total. Thus in Wisconsin, the maximum for temporary total is set at 100 percent of the state's average weekly wage ($329), whereas the maximum weekly rate for permanent partial disability is $112 as of January 1986.

New Jersey's weekly benefits for permanent partial disability are governed by the duration of benefits. Thus minor awards are compensated according to a rate as low as 20 percent of the state's average weekly wage, while major awards (421-600 weeks) are paid on the basis of 75 percent of the state's average wage, as is the case for temporary total and permanent total disabilities.

Table 5.3
Scheduled Permanent Partial Benefits for Loss of an Arm, January 1986

State	Maximum weekly benefits temporary total disability	Number of weeks of benefits for loss of an arm	Maximum weekly permanent partial benefits for loss of an arm	Maximum amount of benefits for loss of an arm	Present value of benefits for loss of an arm discounted at 6%
California	$224.00	421.25	$140.00	58,975	46,708
District of Columbia	431.70	312.00	431.70	134,690	113,111
Florida	318.00			27,500	27,500
Michigan	375.00	269.00	375.00	100,875	86,721
Nevada	332.46	1,612.00	179.39	289,177	131,269
New Jersey	284.00	330.00	208.00	68,640	57,084
New York	300.00	312.00	150.00	46,800	39,302
Ohio	365.00	225.00	182.50	41,063	36,165
Pennsylvania	347.00	410.00	347.00	142,270	113,352
Wisconsin	329.00	500.00	112.00	56,000	42,552

SOURCE: U.S. Department of Labor, Employment Standards Administration, *State Workers' Compensation Laws* (January 1986), tables 6, 8, and 9; plus calculations by authors for Florida and Nevada.

Nevada: Benefits based on 39-year-old person who receives maximum amount of $777.36 per month until 70th birthday.

Neither the weekly rate nor the duration, considered alone, reveals the total amount of benefits. That quantity is the number of weeks times the weekly amounts.

Dollar Amounts

How do these states compare in dollar benefits? Table 5.3 shows the maximum amount paid for what normally is the gravest scheduled loss, the loss of an arm at the shoulder. The last columns of table 5.3 show the present values of the maximum weekly benefits paid for the durations shown.

It is difficult to compare Nevada and Florida with the other states because of their different methods of calculating benefits. Nevada pays six-tenths of 1 percent of a worker's wage up to the maximum amount allowable ($2,159.33 a month as of July 1, 1985) for each 1 percent of disability. The loss of an arm is rated at 60 percent and would pay, at most, $777.36 per month (.006 x 60 x $2,159.33), or $179.39 per week. The worker is entitled to receive such a sum until his 70th birthday, or for at least five years. In our calculations, we assume a 39-year-old worker. Nevada is the most generous of the jurisdictions, although the amounts shown depend, of course, on our choice of the age of the worker. Florida, like Nevada, uses the AMA *Guides* to rate the injuries, and pays $250 per 1 percent of impairment up to 10 percent and $500 for each percent above the 10 percent level.

The differences among the states are extreme, regardless of whether the maximum scheduled amount column or the present value column is used as the basis of comparison. One of the most generous jurisdictions on a present-value basis is the District of Columbia; its duration (312 weeks) is below the median among the nine jurisdictions with duration data, but it has the most generous weekly maximum. The present value of D.C.'s benefits discounted at 6 percent is $113,111. Wisconsin pays for 500 weeks, but with a considerably lower maximum weekly benefit than in D.C., and the resulting maximum scheduled amount is less than one-half of D.C.'s. Present value comparisons are probably more meaningful than comparisons of maximum amount, since they take into account not only the weekly benefit but the time over which it is received. We assume that none of the benefits paid are in a lump sum. The present value of Pennsylvania's amount discounted at 6 percent is $113,352, almost three times the amounts paid in New York, Ohio, and Wisconsin. It is here that one sees the importance of the exclusivity or nonexclusivity of the schedule. Pennsylvania pays only for

scheduled benefits. New York's relatively low sum may be augmented if actual wage loss follows the scheduled number of weeks. In New Jersey the awards are also exclusive in the sense of not being influenced by possible continuing wage loss, but there always is the possibility of a nonscheduled award—for psychiatric considerations, for example—and such matters are not susceptible to exact measurement. Florida's scheduled benefits are also nonexclusive, since a worker may also be eligible for wage-loss benefits.

Utility of the Scheduled Method of Assessing Permanent Partial Disability

The schedule is a list that details the number of weeks to be paid for the loss or loss of use of a specified limb or other part of the body. It is essentially a relative value scale, which places a value on the major members, the arm and the leg, and lesser values on the parts of each of these major concerns. Provision is also usually made for loss of vision, loss of hearing, enucleation of the eye, and sometimes disfigurement.

In antiquity, such schedules as existed served the useful function of substituting a finite amount of money damages for retaliation. Even in ancient times, the amounts to be paid were rated on the basis of several factors, and not necessarily confined to the impairment or functional limitation that arose as a result of the injury. With the growth of the common law and negligence principles, the schedules gave way to an assessment of the consequences of the injury by a jury on an individual basis. Schedules were retained, however, in personal accident policies. Acting on these examples, and on the examples of European countries, when U.S. compensation laws were passed in the first and second decades of this century, all of the states—even those that began without schedules—soon adopted some sort of schedule in their workers' compensation programs.

California followed the example of Russia in issuing a comprehensive schedule with all entries based on a common denominator. The number of weeks of benefits to be paid was adjusted according to the age and occupation of the worker. New Jersey adopted a more limited schedule with relatively few entries, each with a specified number of weeks. New Jersey's law provided very little guidance to the parties as to how such schedules were to be used. Most states followed New Jersey's lead rather than California's. There are two exceptions: in re-

cent times, Nevada adopted the AMA *Guides to the Evaluation of Permanent Impairment*, which go far beyond specifying the names of limbs and the number of weeks to be paid; and Florida, in contrast, all but eliminated its schedules when it adopted a wage-loss method of compensating for permanent partial injuries (see chapter 9).

States are not uniform in their assessment of the relative value of the limbs specified. The value of an arm varies across the states, as does the value of a leg. The value of the minor members in relationship to the corresponding major members is, however, fairly uniform.

The amounts paid for scheduled impairments vary greatly among states, not only because of differences in the number of weeks of compensation, but also because of differences in the amounts to be paid per week as measured by the maximums in the states.

The general function of any schedule, be it an advertising rate schedule, a freight rate schedule, or a workers' compensation schedule, is to provide information on amounts to be paid. In principle, a schedule will promote certainty to the extent that it is detailed, complete (containing as many entries as are likely to be needed), and joined with explicit guidance as to its proper use. Such details and guidance can be communicated via statutory provisions, rules and regulations, advice from the administrators, or possibly simply by a practice widely known among practitioners.

In workers' compensation, how the schedule is used is the most important question, and that question can be approached only with considerations such as those discussed in chapter 4, dealing with procedures. It would be naive to expect that a limited schedule, in and of itself, without rules or guidance as to its use, could provide a great deal of information—or increase significantly the level of certainty as to the benefit amounts due for a particular contingency. Even in the complete loss cases, the amputations, certainty is not guaranteed unless the loss is one exactly specified by a scheduled entry. Given the great number of possibilities as to where an amputation can take place, it is not likely that many amputations will be exactly as specified by a scheduled entry.

The more frequent consequence of an injury is not an amputation, but some degree of loss of use of a limb that remains physically present. Given the variety of functions of every limb, it is obvious that determining the extent of functional limitation is a complex task. The hand not only has functions specific to it, such as its use as a mallet

or pointer in Kessler's terms (1970, p. 20), but it also acts as a sensory organ with which the brain monitors resistance, texture, temperature, weight, and so forth.

Although an injury to the hand requires a fairly sophisticated assessment to determine the resulting functional limitation, the most the typical schedule does is to provide the maximum number of weeks for the total loss of the member to be used as a benchmark. In that respect, a schedule can limit the range of values that can be paid for the consequence of an injury to a member, and hence can limit the range of values over which the parties can quarrel—but only in the special case of an injury whose consequences are confined to one member only and that do not extend to the so-called nonscheduled area by reason of some effect to the worker as a whole.

The problem is complicated further in that the physician may be called upon not only to assess the worker's physical condition, but also to judge to what extent the condition is due to the work-related injury. If the physician decides that a particular functional limitation of the arm is the result of the work injury aggravating a pre-existing impairment of the arm, then the physician may be required to assess the relative contributions of the prior impairment and the new work injury to the resulting functional limitation. Unless given specific guidance by a very comprehensive schedule, rules and regulations, guidelines issued by the agency, or some well-understood rules that have grown up as a matter of practice, different physicians are liable to arrive at very different judgments.

The rules for measuring functional limitation, no matter how they are derived, may or may not call upon the examiner to estimate the impact of a functional limitation in terms of future wage earnings. If they do, the estimates move to a consideration of "disability" factors, as we will see in the consideration of the nonscheduled injuries. In the California schedule, the guides for the assessment of back injuries call upon the rater to make a judgment as to the kind of work the injured worker should be capable of performing. In these cases, the assessment of disability factors is open and explicit. The same is true of some of the entries and rules in Wisconsin's guides. In Ohio, the loss of two or more digits of the hand may call for compensation in an amount greater than scheduled if it can be shown that the injury would cause more than the normal handicap because of the nature of the claimant's work.

How can the method of determining the amount of payments due in scheduled injuries be evaluated? If the purpose of the schedule is to provide information and increase the level of certainty with which decisions about permanent partial disabilities can be made, an appropriate question is whether using the schedule improves the reliability of rating. Can several raters, using the schedule, look at the same consequences of an injury and come up with the same number of weeks? If so, the schedule can be said to increase certainty, and presumably could have the eventual effect of eliminating litigation over the injuries it covers.

If this is the objective, it is obvious that a comprehensive schedule is necessary, and that there must be agreement as to how the schedule is to be used.

The American Medical Association *Guides to the Evaluation of Permanent Impairment* is an example of a comprehensive schedule that covers all body systems. The users are instructed to evaluate impairment or functional limitations only, without regard to the other consequences of the injury. Theoretically, it should be possible for physicians to use the method of measurement called for in the *Guides* with a high degree of correspondence among their ratings. At the same time, we ought to recognize that since it deals only with measurement of impairment and functional limitations, its desirable contributions to objectivity may be purchased at the expense of ignoring some of the consequences of the injury. The *Guides* contain no adjustment for the age and occupation of the worker, or any other proxy that measures work disability in specific cases. Neither is any attempt made to measure subjective pain, except to the extent that the physician evaluates the ability of the person to make a particular movement and infers the degree of pain associated with that movement.

Other bases for compensation benefits may be appropriate in addition to impairment and functional ratings. We examine that policy issue in part IV of this study.

NOTES

1. Driver and Miles (1960, pp. 406-11). Some of the differences between the Babylonian and Mosaic Laws are discussed in Hertz (1975, pp. 403-6).

Hertz maintains that the church's Father Augustine was one of the first to declare that taliation was the law of justice, not of hatred, in that it was one eye, not two, for an eye; one tooth, not ten, for a tooth; and one life, not a whole family's lives, for a life. He quotes authorities on inter-

national law to sustain his position that the rule enjoined, on the one hand, that a fair and equitable relation must exist between the crime and the punishment, and, on the other hand, that all citizens are equal before the law and their injuries were to be valued according to the same standards. In the Mosaic law, monetary commutation became the rule except in capital cases, and it is Hertz's contention that in the code of Hammurabi, the money compensation prevailed in the cases of injury only to the slaves. Hertz points out that the two systems are independent codifications of ancient Semitic common law, and the resemblances are probably due to the common usages of the Semitic ancestors of both Babylonians and Hebrews.

2. "If [the wound] healed up and then reopened, and healed again and opened up once more, he is liable [for all expenses] to cure him, but once it is healed up thoroughly he is no longer liable to heal him." The quotations and the information about the commentaries are from Blackman (1983, Vol. IV, pp. 62-64). The more traditional citation would simply be *Mishnayoth*, Baba Kamma, Chap. 8 (Hachovel), Mishna 2.

3. *Aldrich v. Palmer*, 24 Cal. 513 (1863).

4. *Illinois Central Railroad v. Barron*, 5 Wall. 90, 105 (1866). Both cases are cited in Dodd (1936, p. 617).

5. Larson, citing Geerts, Kornblich, and Urmson (1977, p. 110).

6. Nevada and Massachusetts, according to Reede (1947), adopted schedules in 1911. The schedule in Massachusetts was much less detailed than Nevada's, and not altogether on the basis of the New Jersey schedule. In 1912, Michigan followed New Jersey; and Rhode Island followed the Massachusetts plan, which allowed subsequent compensation for demonstrated loss of earnings. The new laws adopted in 1913, with the exception of the West Virginia law, included schedules, six of them modeled after New Jersey and one of them modeled after Massachusetts. During the same year, amendments in Illinois and Ohio added schedules similar to that of New Jersey, so that by the end of 1913, 14 laws contained partial disability schedules while 6 used exclusively the system of rating loss of earning capacity. The latter system was used in the remaining states for nonlisted injuries (Reede 1947, p. 138).

On January 1, 1915, 17 states used schedules of compensation for specific injuries. Nine states made these payments to the exclusion of any other payment for injury (Connecticut, Iowa, Louisiana, Maryland, Michigan, Minnesota, Nebraska, Oregon, and Wisconsin). These states made no distinction between the temporary total benefit paid during the healing period and the amounts that they would receive under the schedule.

Five of the laws, effective on January 1, 1915, provided scheduled payments for injuries in addition to payments for temporary total disability during the healing period: Illinois, Nevada, New Jersey, New York, and Ohio. Three of the states, Massachusetts, Rhode Island, and Texas, allowed subsequent compensation for demonstrated loss of earning capacity. What is interesting in these states, however, is that there is still an overall limitation. Under the Massachusetts law, a person could receive temporary total disability during the healing period, then a short period of scheduled payments, approximately 50 weeks, and then compensation for subsequent loss of earning capacity. The limitation on payments under all of the provisions in Massachusetts was for 500 weeks, a specified sum of $3000.

Reede then takes up the revisions between 1915 and 1940. Amendments to Texas and West Virginia provided a flat rate schedule exclusive of any kind of compensation. Twelve of the new laws adopted such a schedule, and four adopted a schedule allowing additional payments during the healing period. The schedule system was more firmly established, with 22 states employing the system exclusively, and 11 compensating total disability as well. Only five states had altogether

avoided the flat rate schedule: Arizona, New Hampshire, California, Washington, and Wyoming. California is an exception, only because its schedule was not contained in the statute. In 1937, the last state with no schedule of any kind, New Hampshire, adopted a flat rate schedule of specific injuries.

7. Discussion of "Report of Committee on Statistics and Compensation Insurance Costs" of the International Association of Industrial Accident Boards and Commissions (1923, p. 87).

The Bureau of Labor Statistics published its Bulletin 126, *Workmen's Compensation Laws in the United States and Foreign Countries*, in 1914. It gave a fairly detailed description of the various foreign schedules and discussed their advantages and disadvantages.

8. U.S. Chamber of Commerce (1986, Chart VII).

9. U.S. Chamber of Commerce (1986, Chart VII).

Chapter 6
Nonscheduled Benefits in Impairment (Category I) States

Categorization of the States for Nonscheduled Injuries

We divide states into three categories according to the method used to evaluate nonscheduled injuries. In category I are those jurisdictions in which the physical impairments or functional limitations that are consequences of the work-related injury are rated as a percentage of total disability; in category II, those that assess consequences on the basis of the loss of wage-earning capacity; in category III, those in which actual wage loss is a necessary condition for benefits. We use these categories with the caution that distinctions are by no means clear-cut. We will note differences among jurisdictions within the same category and commonalities among states in different categories.

We include New Jersey and Nevada in category I. Ohio provides workers a choice of methods for assessing permanent consequences of injury. One of these choices is to base the assessment on an evaluation of impairments or functional limitations, and we discuss Ohio's method of assessing impairment in this chapter.

Nevada assesses all cases—without distinction between scheduled and nonscheduled injuries—on the basis of the American Medical Association's *Guide to the Evaluation of Permanent Impairment*. New Jersey and Ohio use schedules for those injuries that are listed and use the total number of weeks for complete disability as the referent for all cases not listed. The role of factors other than impairment in assessing the benefit amounts, and the amount of guidance given the raters, differ greatly among these states, and we comment on these differences below.

Despite our categorization, Ohio and New Jersey do not assess *solely* on the basis of impairment or functional limitation. Both states implicitly take into account the consequences of the impairment for a worker's future role in the labor market. (Nevada is a less clear-cut case.) In some states, little formal guidance is given the evaluators of nonscheduled injuries, and so the internist or other specialist may evaluate the consequences of a given heart condition quite differently for a lawyer

and a truck driver, for a young man and an old man, and so on. We provide examples from our field work reports of how these adjustments are made without any particular basis in statutory or administrative rules.

Why then denominate these jurisdictions as ones that assess on the basis of impairments or functional limitations? In part, because in these states a physician is called upon to assess the physical condition of the claimant. The physician's evaluation is based primarily, even if not exclusively, on the extent of the physical or mental damage and on his estimate of the worker's residual capacity.

If the methods used in category I are contrasted with the methods used in category III, the wage-loss states of Florida, Pennsylvania, Michigan, and New York, and the alternative method in Ohio, several distinctions become apparent. However "disability" factors are taken into account in the assessment of the permanent consequences of the injury in New Jersey or Nevada, it is clear that workers in these category I states need not experience an actual wage loss in order to receive a permanent and partial disability award. In category I jurisdictions, the rater need never address the question of whether the injury under examination puts the worker at a disadvantage in the labor market. The rater instead evaluates the worker's condition against the standard of a normal unimpaired man. His concepts of normality may not be based strictly on medical factors, such as prescribed in the AMA *Guides*, and may be conditioned by factors such as age, occupation, experience, and training. Nonetheless, the rating is essentially centered on the worker's physical or mental condition. We classify the rating methods in Florida, Pennsylvania, and New York, and one of the methods in Ohio, as wage-loss methods because they endorse compensation in nonscheduled cases only in the event of actual wage loss assessed on a retrospective basis (at least that is the theoretical prerequisite for benefits in those jurisdictions). In Michigan, as we shall see, compromise enters into the handling of a great many cases, and the exact basis for settlement is not always clear. But compromises are not the rule in the other jurisdictions, and in those states the distinction between scheduled injuries (rated strictly on medical factors) and nonscheduled injuries (requiring actual wage loss) is quite clear.

California, Wisconsin, and the District of Columbia are left in an *intermediate* category II group, between actual wage loss on the one hand and impairment on the other, and are designated as states that assess on the basis of loss of wage-earning capacity. For convenience, we in-

clude California in this category even while recognizing that California is different. In California the standard rating is based on impairment factors, but is then adjusted by age and occupational factors. Taking age and occupation into account is one method of assessing wage-earning capacity.

In all three categories of states, the rater must use medical judgment to determine if at least some permanent consequences stem from the worker's injury. If not, the worker is not entitled to permanent disability benefits. Beyond that threshold determination, the three categories of states diverge as outlined above.

We will now proceed to examine the impairment and functional limitation criteria used to evaluate partial disability in New Jersey, Nevada, and Ohio.

New Jersey

Introduction

New Jersey is one of the pioneering states in the field of workers' compensation.[1] It was one of the first states to enact any type of workers' compensation law, and it was the first to adopt a schedule (see chapter 5). New Jersey also pioneered in that its statute was elective, a method designed to overcome the perceived constitutional obstacles to a compulsory law in 1911. New Jersey's original act did not provide for compulsory insurance. Insuring one's liability was altogether optional for employers. Rubinow denotes this type of insurance and liability arrangements as the "New Jersey plan" (Rubinow 1916, p. 183).

In recent decades New Jersey has been well known for its "permanent partial problem." The problem, it is safe to say, is hardly a new one. The Somers used 1951 data to show that the proportion of compensation cases in the permanent partial category was higher in New Jersey than in the industrially important states of Illinois, New York, Pennsylvania, and Wisconsin. Moreover, New Jersey had the lowest average award per case (Somers and Somers 1954, pp. 74-79). By 1956, 72 percent of all closed compensated cases involved permanent partial disability, and they accounted for 89 percent of the compensation benefits awarded. Employer groups in New Jersey complained about the ever-increasing number of permanent partial cases "where there is no apparent disability and little or no loss of time or wages" (Berkowitz 1960, p. 69). In 1957, a commission set up to study laws affecting industrial

development noted, in what was to become an oft-repeated refrain during the years, that the major problem in workers' compensation was the payment of many claims for permanent partial disability in amounts up to $800 where there was no apparent disability and little or no loss of time or wages, and where the claim often rested on subjective complaints (Berkowitz 1960, p. 68).

A New Jersey study commission reported in 1973 that New Jersey was paying an enormous number of relatively small awards in permanent partial cases, which, in the aggregate, consumed a very substantial portion of workmen's compensation resources. (The charges are corroborated by the data in tables 3.8 and 3.16.) Many of these awards were for injuries that did not involve permanent disability under any of the theories familiar to the Commission (New Jersey Study Commission 1973, p. 23).

The Commission recommended substantial changes in New Jersey's law, including an increase in the rates paid for permanent partial, award of benefits on the basis of the extent of permanent impairment as established in the AMA *Guides*, and payment of continuing wage-loss benefits in cases where wage loss occurs and impairment at the initial evaluation step is rated at 20 percent or higher. No legislation resulted from the Commission's report, and it was not until 1979 that forces coalesced to bring about changes in New Jersey's statute to address the permanent partial problem. What came to be perceived as an excessive number of minor permanent partial disability awards in New Jersey stemmed from the courts' interpretation of the statutory language. New Jersey lists a limited number of injuries in its schedule, with 23 different entries. The statute (N.J.S.A. 34:15-12[22]), provides:

> In all lesser or other cases involving permanent loss, or where the usefulness of a member of any physical function is permanently impaired, the duration of compensation shall bear such relation to specific periods of time stated in the above schedule as the disabilities bear to those produced by the injuries named in the schedule. In cases in which the disability is determined as a percentage of total and permanent disability, the duration of the compensation shall be a corresponding portion of 600 weeks.

From the earliest days of the law, claimants were not required to show any present or anticipated future wage loss in order to be eligible to receive compensation for the consequences of an injury. In the case

that enunciated that concept, *Brubage v. Lee*, 87 N.J.L. 36 (1915), compensable disability was defined as "any loss of physical function which detracts from the former efficiency of the body or its member in the ordinary pursuits of life." The definition was refined further in *Hercules Powder v. Morris Co. Court*, 93 N.J.L. 93 (1919), when it was established that permanent impairment of the physical entity is compensable in the absence of any showing of functional impairment. Similarly, in *Kiczko v. Baylis*, 20 N.J.Misc. 323 (1942), it was held that compensation was dependent not on loss of efficiency, but on whether there had been a loss of any portion of the scheduled member. In keeping with that concept, compensation, whether for scheduled or for nonscheduled injuries, has been awarded for impairment to the worker as a "physiological unit"; for "structural change"; for "fault akin to a traumatic injury"; for "loss of (personal) anatomy"; and for "physical loss and not industrial capacity" (Lefelt 1975, p. 597).

The term "ordinary pursuits of life" seems to have almost limitless applications. The category includes recreation, procreation, avocation, and many other activities. There does seem to be some restriction on the broad concept in *Barbato v. Alsan Masonry and Concrete, Inc.*, 64 N.J.L. 514 (1974), in which disability was defined as "loss ensuing from personal injury which detracts from the former efficiency of the workman's body or its members in the ordinary pursuits of life, in relation to the field of service to which he is suited." However, the implications of that qualification upon disability determinations have not yet been felt (Lefelt 1975, p. 598). The decision has been used to justify a permanent total award on the basis of unemployability. We discuss the changes brought about by the 1979 amendments below.

Changes in New Jersey's Law

The 1973 Study Commission raised several procedural issues about the operation of the law. The Commission observed that at every stage of the workers' compensation proceedings, factors were at work to ensure that virtually no claim relating to the existence or the extent of disability would be denied. The volume of cases and the controversies had led to delays in payments for medical services and for temporary disability. They noted the limited role of the Division of Workmen's Compensation and what they perceived to be an absence of reasonably precise standards defining disability. We document later the Commission's observations that disability evaluation techniques were developed by the physicians, who alone had custody of this knowledge. Their

testimony, according to the Study Commission, was governed not only by medical considerations but by considerations of other factors, such as age, sex, education, and economic and social environments, which are much less precise and which only the physicians knew how to include in their testimony.

The 1973 Commission reviewed files of 74 workers' compensation permanent partial cases selected at random and observed that the disability evaluations of both the respondents' and the petitioners' doctors were frequently based on pure guesswork and self-serving declarations with little physiological or other logical rationale.

Amendments of the law did not come until 1979. (The 1978 data in tables 3.8 and 3.16 show that minor permanent partial cases still dominated the New Jersey program one year prior to the amendments.) Senate Bill S. 802, introduced on February 9, 1978, was originally drafted by representatives of the business community. In an effort to solicit the support of organized labor, a series of amendments was hammered out and the final version was adopted by the legislature on November 13, 1979, and signed by the governor on January 10, 1980, as P.L. 1979, Chapter 283 (Napier 1981).

One objective of the new law was to eliminate the payment of benefits for minor permanent partial disabilities and to direct the money to more seriously disabled workers. It sought to accomplish this objective, not by any radical change in the philosophy by which awards were given, but by revising the statutory definitions of permanent partial disabilities. The amendments stated (at N.J.S.A. 34:15-36):

> "Disability permanent in quality and partial in character" means a permanent impairment caused by a compensable accident or compensable occupational disease, based upon demonstrable objective medical evidence, which restricts the function of the body or its members or organs; included in the criteria which shall be considered shall be whether there has been a lessening to a material degree of an employee's working ability. Subject to the above provisions, nothing in this definition shall be construed to preclude benefits to a worker who returns to work following a compensable accident even if there be no reduction in earnings. Injuries such as minor lacerations, minor contusions, minor sprains, and scars which do not constitute significant permanent disfigurement, and occupational disease of a minor nature such as

> mild dermatitis and mild bronchitis shall not constitute permanent disability within the meaning of this definition.

This statutory definition preserves the essence of the impairment theory, so New Jersey still belongs as a category I state. However, the loss-of-earning-capacity approach is also used in the new law, which moves New Jersey closer to the border between our category I and category II. In addition to reformulating the basis for benefits, the new statute requires "demonstrable objective medical evidence." As a result, cases that formerly were compensated as permanent partial impairments of a minor nature are presumably excluded under this statute.

Also changed were the criteria for compensable heart attacks. Awards based on compensable heart attacks had increased from 367 in 1975 to 526 in 1979, and in response the criteria were made more restrictive (Napier 1981, p. 4). The claimant must prove that injury or death was produced by the work effort or strain in excess of the wear and tear of the claimant's daily living (N.J.S.A. 34:15-8.3). The previous criterion was that whenever the required exertion was too great for the person undertaking the work, whatever the degree of the exertion or the condition of the workplace, the heart attack was compensable.[2]

Also, under the new law, New Jersey has moved to a type of apportionment statute. Pre-existing disabilities due to the deterioration of a tissue, organ, or part of the body through the natural aging process are not to be compensated and are to be deducted from the overall disability (N.J.S.A. 34:15-31(b)).

As a *quid pro quo* for the tightening of these criteria for permanent partial disability benefits, the compensation rates were substantially increased. Prior to the amendments, the New Jersey maximum weekly benefit was $40 a week for permanent partial disability awards. Under the new law, the weekly maximums for permanent partial disability increase with the severity of the disability. Thus, the maximum weekly compensation available for the first 90 weeks of allowable compensation is set at 20 percent of the statewide average weekly wage. For those awards that range from 421 to 600 weeks (the maximum number of weeks), the maximum weekly benefit is 75 percent of the state average weekly wage. Thus as the duration of the permanent partial disability benefits increases, whether by reason of a scheduled or an unscheduled award, the maximum weekly compensation goes up. The same nominal percentage of lost earnings is paid for temporary total disability as for permanent partial and permanent total disability, namely 70 per-

cent of the worker's preinjury wage. For temporary and permanent total disability, the maximum weekly benefit is 75 percent of the state average weekly wage, regardless of the duration of the disability.

In a separate piece of legislation, Senate Bill S. 3362, the legislature for the first time enacted an occupational hearing loss statute. It adopted criteria for the extent of the noise hazard necessary to produce a sensory neuro-hearing loss, and provided a formula for the calculation of the level of hearing impairments intended to cut back on many of the claims held compensable before the new law. (In years prior to 1980, an average of 1,500 awards per year were made for occupational hearing loss.) Standards were included for audiometric testing, and preexisting hearing impairments were deducted from the overall impairment in assessing compensable disability.

Perhaps the 1979 amendments are significant as much for what they did not do as for what they did. Although benefit levels were increased and disability definitions were changed, there was no fundamental change in the philosophy about which consequences of injuries justify compensation. Nor was additional guidance provided to the parties as to how to evaluate permanent partial disability. Nothing in the new statutes necessarily changes the procedures in the old law (which are discussed below).

In contrast, the 1973 Commission, which delved deeply into the permanent partial problem, recommended a four-step procedure for evaluating and awarding benefits for injuries and diseases with permanent consequences. The first step was the payment of temporary total benefits during the healing period. The second was a waiting period—which exists in the current law—of six months after maximum healing has been reached before permanent partial benefits could be paid. The third step was the award of benefits based on the extent of permanent impairments as established by the AMA *Guides* in multiples of 1 percent. The Commission recognized that such changes logically required the elimination of the schedule in the law, and they recommended its abolition except in cases of absolute incapacity limited to paraplegia, total loss of bilateral vision, and total loss of use of both hands, both feet, both arms, or any two thereof. These conditions led to a conclusive presumption of permanent total disability, and benefits would be payable for life without regard to the possibility of rehabilitation or actual earnings.

The fourth step was a wage-loss benefit. If impairment at the initial evaluation step were 20 percent or higher, the Commission recommended that the worker be considered for additional benefits after the expiration of the period during which he received his impairment benefits. These would be conditioned upon the showing of actual loss of wages suffered by the worker. The hearing officer would be directed to determine causation, that is, whether the wage loss was caused by the impairment in relation to such factors as rehabilitation success, age, occupational training or work experience, attitude, formal education, and capacity for competing in the open labor market. Employee wages earned before the injury would be contrasted to the wages earned after the injury, giving consideration to changes in wage rates and labor conditions. These benefits would be paid for the duration of the wage loss. The purpose of these recommendations was to encourage rehabilitation or return to some form of work, and to encourage employers to rehire injured workers.

The concern in the 1979 amendments seems to have been narrower, with an attempt to substitute statutory language for decisions that had evolved over the years. The apparent goals of the amendments were to reduce the numbers and costs of permanent partial disability cases, and in particular the dominance of minor permanent partial awards. The available evidence suggests that these goals were only partially achieved. Between 1978 and 1982 (the latest year with available data as of 1986), the number of all permanent disability cases as a share of all cases dropped in New Jersey (table 3.9), and this is true for the three types of permanent disability cases: permanent total, major permanent partial, and minor permanent partial (tables 3.6 to 3.8). Nonetheless, as of 1982, the New Jersey shares of all cases accounted for by minor permanent partial cases (table 3.8) and by all permanent disability cases (table 3.9) were more than 200 percent of the national average shares.

The average costs of all New Jersey permanent disability cases increased between 1978 and 1982 relative to the U.S. averages (table 3.13), and this was also true for each of the three types of permanent disability cases (tables 3.10 to 3.12). Nonetheless, because of the numerical dominance of minor permanent partial cases in New Jersey, as of 1982 the average cost of all permanent disability cases in the state was only about 57 percent of the national average (table 3.13).

A significant measure of the developments in New Jersey since 1978 is the share of all cash benefits accounted for by permanent disability benefits, a statistic that reflects the declining importance of New Jersey permanent disability cases as well as the increasing average costs of those cases. The data show that the share of all costs represented by permanent disability cases in New Jersey was relatively stable between 1978 and 1982, increasing from 110 to 113 percent of the national average (table 3.17). It is surprising, in light of the intended purpose of the 1979 New Jersey legislation, that the increasing overall share of costs was primarily due to the increased importance of minor permanent partial disability cases between 1978 and 1982. By 1982, these minor cases accounted for 49 percent of all cash benefits in New Jersey, more than twice the importance of such cases nationally (table 3.16).

The increasing share of all cash benefits accounted for by permanent disability benefits between 1978 and 1982 would have been expected to increase the employers' costs of workers' compensation in New Jersey between 1978 and 1984 according to our analysis in chapter 3. The data in table 3.18, however, indicate that New Jersey insurance costs dropped from about 20 percent above the national average in 1978 to about 10 percent below in 1984. We do not have a full explanation of the contrary movements in New Jersey between shares of costs accounted for by permanent disability benefits and the employers' costs of workers' compensation. Burton and Krueger (1986, pp. 179-97) examined cost developments in New Jersey, New York, and Connecticut between 1972 and 1983 and argued that one explanation of the developments was the movement of maximum weekly benefits for total disability. New Jersey's maximum for total disability compared to the state's average weekly wage has lagged behind the maximum in other jurisdictions in the last decade. As of 1986, for example, the New Jersey weekly maximum for temporary total disability benefits was $284, which represented 79 percent of the state's average weekly wage—a record exceeded by 34 other jurisdictions (U.S. Dept. of Labor, *State Compliance*, 1987).

The reductions in the New Jersey employers' costs of workers' compensation insurance between 1978 and 1984 thus appear to be in spite of, rather than because of, the attempted reforms of permanent partial disability benefits in 1979. The legislation does appear to have reduced somewhat the numerical importance of permanent partial cases, but not the significance of such cases in terms of share of costs. The lesson may be that meaningful changes in the New Jersey approach to perma-

nent partial disability benefits may require reforms as fundamental as those endorsed by the 1973 Study Commission.

Procedure for Permanent Partial Cases

Few changes were made at the procedural level in the 1979 law. What follows is a review of the procedures that prevailed at the time of our field investigation.

Administratively, New Jersey classified itself as a direct payment state, one in which compensation is initiated and paid by employers and carriers, who notify the Division of Workers' Compensation as to when and how much compensation is being paid. In the law (N.J.S.A. 34:15-50), the system is referred to as an agreement system, although in practice no signed agreement between the employee and the employer (carrier) is necessary before compensation is paid. The so-called direct or voluntary payments are important for cases involving temporary disability benefits only, since permanent partial cases usually end up at a more advanced stage in the procedure.

An employee, his employer, the carrier, or the Division itself may request an informal hearing at a regional office before a hearing officer. Serious disability cases and questions of liability go directly to a formal hearing, but all minor permanent partial cases, if contested, must go through the informal process. The worker may or may not be represented by an attorney at the informal stage. The hearing official may propose a settlement based upon the medical evidence. If the suggestion is accepted by both parties, the case ends. If the suggestion is not accepted, or if none is made—perhaps because there is serious question of liability—the parties are notified of their rights and the burden for initiating a formal hearing rests on the employee.

The number of cases heard by the judge in one session varies. In a session in which minor permanent partial awards are made for fingers and minor injuries to the hand resulting in disability ratings of less than 5 percent, it is not unusual to process 25 cases in a morning session. In these cases, the outcome depends not only on the physician's findings, but also on an informal bargaining process between the carrier's representative and the petitioner's lawyer, with the hearing officer closely involved, making suggestions based on his observation of the claimant and the condition of his fingers or hands.

If the informal process does not result in an agreement, a formal hearing is initiated by the filing of the claim petition with the Division. If

it appears that the issues are simple, possibly with only a narrow difference between the parties as to the extent and nature of the permanent partial disability, the claim may be scheduled for an accelerated award proceeding in which a binding decision is made by the judge based upon his review of the medical reports submitted. The matter may, however, go before a pretrial conference in which an attempt is made to list the legal, medical, and factual issues to be tried, the witnesses to be used at the time of trial, and so on.

Before the 1979 amendments, there was no provision in the New Jersey statute for compromise and release settlements. In practice, at the pretrial conference the judge would try to reach a compromise agreement acceptable to both sides. With the parties' agreement, the judge would issue an order in accordance with the settlement as an outcome of formal proceedings. It became a formal award, but such a compromise did not operate as a release. If the petitioner's physical condition changed, he could come in for review or modification of the award, so long as he did so within the statute of limitations.

The 1979 amendments specifically provided for compromise and release settlements for the first time. Under the new law, the judge of compensation, with the consent of the parties, after considering the testimony of the petitioner and other witnesses together with any stipulations of the parties, and after determining that it is fair and just under all the circumstances, may enter "an order approving settlement." That order has the force and effect of a conclusive dismissal of the claim petition. It is a complete surrender of any rights to compensation or other benefits arising out of such claim, both for the employee and for the employee's dependents, under the statute.

The petitioner has to be represented by an attorney and it has to be shown that the issue involves questions of jurisdiction, liability, causal relationship, or dependency of the petitioner. Any payment made under these procedures is to be recognized as a payment of workers' compensation benefits for insurance rating purposes only, and not as an admission of liability for workers' compensation benefits (N.J.S.A. 34:15-20).

Determining the Disability Rating

Settlement Procedures. In informal hearings, the percentage of disability is usually the percentage suggested by the hearing officer to the parties. In pretrial conferences in which a settlement is reached, a com-

promise figure, usually between the percentages stated by the respective parties' doctors, is worked out among the attorneys and the hearing officer. In a formal trial, however, the percentage of disability must be decided by the judge, based upon the evidence before him derived, for the most part, from the testimony of physicians. The skill and experience of the physicians, and the skill and experience of the attorneys in eliciting the appropriate answers from the physicians, become crucially important in such a process. At the formal trial there will be at least two reports, one from each of the parties' physicians, and, in addition, each of these physicians may testify. In a complicated case, more than one specialist (for example, a neurologist as well as an orthopedic specialist) may testify, each of them evaluating the percentage of disability.

It is important to note that the physician will almost always include a percentage rating in his report. This need not be a pure impairment rating, because he may also include his evaluation of the importance of nonmedical factors such as a patient's age and occupational status. Under the old law he could also note and evaluate subjective complaints. The 1979 amendments changed this, since "demonstrable objective medical evidence" is necessary to sustain a finding of "disability permanent in quality and partial in character" (N.J.S.A. 34:15-36).

Each of the physicians testifying at the formal hearing is retained by one of the parties. It would cause great shock if the petitioner's physician came in with a percentage rating of disability that was less than that of the respondent's. Such an event is rendered highly unlikely by the discovery procedures at the pretrial conference, which give each side a fairly good idea of the other's position.

It has been argued that judges of compensation have abdicated the responsibility for the evaluation of disability to the physicians. The accusation is not entirely fair, since final responsibility rests with the judges. Yet the physician's role is important, and for the most part, the physicians exercise discretion without any agency guidance as to how to evaluate the consequences of injuries. New Jersey does not provide what we have termed in the procedures chapter "evaluation" guidance as to the normal accepted ratings or the range of ratings for particular types of impairments, functional limitations, or even disabilities. As a result, the physicians have developed evaluation techniques governed not only by medical considerations, but by other considerations with which only they, as a corps of experts, are familiar.

A Physician's View. Saul B. Lieb, a physician experienced in workers' compensation matters, notes that the question of the amount of disability in nonscheduled cases does not lend itself to any easy practical guides. In the case of lost members of the body, there are statutory provisions in terms of weeks of compensation. "Otherwise the law is silent, assuming that the judge of compensation will make an award guided by expert medical testimony" (Lieb 1975, p. 62). In his view, the expert's estimates of disability are guided by:

> functional and anatomical impairment as determined by a medical examination; examiner's personality; petitioner's or respondent's viewpoint; prognosis (medical outlook for the future); social adaptability; impact on economic future; and examiner's experience as to awards in prior cases. (Lieb 1975, p. 65)

These criteria allow for idiosyncratic factors and economic or "disability" factors in terms of our typology. Lieb also recognizes that the examining physician's knowledge of what awards have been made in similar cases will necessarily have an impact on his estimate. In Lieb's view, the expert is one who knows how much has been awarded in similar cases.

Lieb recognizes that the legal merits of the case have a great deal to do with the eventual disability rating. Where there is a serious legal question about notice, or the facts of exposure, or the authenticity of an alleged accidental occurrence, the case may be disposed of with a markedly diminished disability rating (Lieb 1975, p. 71). We are presented here with a traditional type of problem in estimating benefit amounts. A 10 percent rating may be awarded, not so much because a man has an impairment of 10 percent of total, but because there is only a 10 percent chance that he has any disability, or only 1 chance in 10 that the impairment is the result of an occupational exposure or trauma.

An instance of how the system of rating operated in New Jersey before the 1979 amendments, and one that illustrates the shortcomings that provoked demands for change, is the way disability ratings were given for fractures. The theories discussed up to now dealt with physical impairment, such as loss of limb; functional limitations, defined as restrictions of motion or ability to make particular movements; and work disability, which is the effect that functional limitations can have on a worker's job chances. Where does a completely healed fracture that

leaves no impairment, functional limitation, or apparent disability fit? Saul Lieb contends that fractures have been a tremendous part of the injuries seen in workers' compensation; note that the reference is to an "injury," not to any permanent impairment. A fracture of the wrist (Colle's fracture) has been evaluated at 25 to 35 percent of a hand; a simple fracture of the finger has been evaluated at 25 to 35 percent of the finger (Lieb 1975, p. 83). The 1979 amendments were designed to change the old practices. They explicitly stated that injuries such as minor lacerations, minor contusions, and minor sprains do not constitute permanent disability (N.J.S.A. 34:15-36). Under the new law, it has become more difficult to collect awards in the absence of a showing of a permanent impairment that restricts function and affects an employee's working ability.

Lieb concludes his presentation with an admonition to lawyers that the only way for the lawyer to become familiar with compensation practice is to apply himself, keeping up with the latest developments, refreshing his knowledge by constant reading and study in textbooks concerning anatomy, physiology, and pathology. He advises lawyers to be guided by the judges of compensation, who have developed a great deal of knowledge concerning the medical status of compensation cases.

Field interviews with lawyers and experts for both sides yield the same conclusion—most judges of compensation do become expert in rating. They are not products of any formal training program; their expertise is derived from a layman's exposure to physicians' reports over the years. From the treating physician's reports, the judge gets an idea of the type of injury sustained and the range within which the disability rating will fall. The judge is informed by the petitioner about complaints, and his evaluation of these complaints may well influence where, in the range, the decision will be. Such complaints may well involve the claimant's evaluation of his poor employment prospects. The judge may evaluate such information in light of the petitioner's age, occupation, and possibly even the effects of the injury on the nonwork activities of the claimant. But no criteria for weighting these complaints are set down. The judge decides a percentage based on his opinion of the medical evidence and his evaluation of the importance and severity of the complaints. Interviews with the staff of the division indicate that they would not be surprised if two judges gave different percentage awards for the same case, but they would expect the differences to be rather small. Of course, such a system works, but inevitably at the expense of extensive litigation.

New Jersey's 1979 amendments are the product of a compromise. It is significant that those amendments did not adopt a theory of permanent partial disability any different from the traditional one in that state. The path to improvement taken by the 1979 law was to redefine, or define for the first time, the concept of impairments. To be sure, these were not the only changes. Benefits were liberalized substantially, and in return not only was the definition of permanent disability tightened, but employers were allowed credits for preexisting disabilities to employees in the determination of awards for permanent partial and permanent total disability claims. Rules dealing with compensation for heart attacks changed. The basic change was the statutory definition of a permanent disability requiring a demonstration of objective medical evidence and a diminution of the claimant's work ability. The medical evidence, according to the explanatory note attached to the bill, is understood to mean evidence exceeding the subjective statement of the petitioner.

Still other changes, which ought not to be ignored, were made. The amendments limit the base upon which the attorney's fees are to be paid. Fees are assessed only at the amount awarded beyond an employer's offer, provided that offer is made within designated time frames. But nothing in the new law strengthens administrative procedures. Nothing in the amendments provides for evaluation or monitoring in the sense we have talked about.

The long-run effects of these changes on the equity, efficiency, and adequacy of the New Jersey statute cannot be evaluated yet. The initial impact does not seem too promising, as indicated by our discussion of the changes between 1978 and 1982 in the distribution of the benefit dollars. Surely, one of the primary objectives of the 1979 amendments was to move a larger part of the compensation dollar from the minor permanent partial awards, where no wage loss was suffered, to those workers with more serious injuries, and the evidence indicates that this objective has not been met.

Nevada

Nevada's Changing Organizational Structure

Until 1982, the Nevada Industrial Commission (NIC) operated the exclusive state fund and administered the workers' compensation act. There were three commissioners. One was selected from lists submitted to the governor by the AFL-CIO, one was appointed from lists sub-

mitted by employer groups, and the third was the chairman, who was required to have at least five years of actuarial experience and a master's degree in business administration or its equivalent. The chairman at the time of our field visits (1975-76), John Reiser, concentrated on the administrative aspects of the system, and hearings were conducted by the two other members.

The NIC acted as both the state workers' compensation agency and the state fund administrator. It determined insurance classifications and rates, made investments, directed the rehabilitation program, and administered the safety program and the State Inspector of Mines offices. It supervised the initial adjudication of claims and also functioned as the appellate board for the first level of appeal beyond the claims department. A separate appeals officer (not an NIC employee, but with functions and duties provided for under the workers' compensation statute, NRS 616.542) heard appeals from decisions of the NIC.

A complaint about the operations of the NIC was that the same commissioners were supervising the insurance function, administering claims, and adjudicating disputes. The 1981 legislation changed the organization so as to separate these functions and, for the first time, allow for self-insurance for qualified employers.

Effective July 1, 1982, the Nevada Industrial Commission was replaced by a new organization, the State Industrial Insurance System (SIIS), with a seven-member board of directors and a general manager designated as operating chief. The insurance regulation responsibilities rest with a newly formed Division of Insurance Regulation under the Department of Industrial Relations headed by a director and with a seven-person advisory board.

The Department of Industrial Relations also includes the Division of Mines Inspection and the Division of Occupational Safety and Health. The Department of Industrial Relations is responsible for regulation of all aspects of workers' compensation insurance, such as the certification of self-insurers and the establishment of rates, as well as for occupational safety and health. The appeals function remains with the hearings and appeals officers in the Department of Administration.

The SIIS's board of directors has three representatives of policyholders, three representatives of organized labor, and one public member. The SIIS is the exclusive fund insurer in the state, covering all employers except those who are qualified as self-insurers. Within

the SIIS, the division of regional operations is responsible for most field services and has the most direct contacts with claimants and policyholders. SIIS also includes the benefits services department with its medical advisors and benefit delivery sections in which the disability prevention teams and counseling specialists are housed. The Rehabilitation Center at Las Vegas is a separate division of SIIS.

Changing Methods of Evaluating Permanent Partial Disabilities

Nevada is an interesting state to examine because of the changes through time in the criteria for permanent partial disability benefits. Four periods of development can be distinguished: the years before 1972; 1972-73; the period from the 1973 amendments to the organizational changes of 1981; and from 1981 forward. Certain of the organizational changes did not become effective until July 1, 1982.

Before 1972, Nevada's statute contained a fairly comprehensive schedule. Scheduled awards, or, in terms of the Nevada law, awards for "specified injuries" (NRS 616.590), were listed in terms of number of months of benefits. Amputations of the arm at the shoulder, for example, called for an award of 60 months of benefits, payable at the rate of 50 percent of the worker's average monthly wage subject to a minimum and a maximum.

The second section of this statute provided that if the specific injuries

> result in a residual physical disability to parts of the body other than the members affected, the commission may consider and award additional compensation taking into consideration, among other things:
>
> (1) Any previous disability;
> (2) The occupation of the injured employee;
> (3) The nature of the physical injury;
> (4) The age of the employee, and
> (5) Such other factors as may be compatible with the injury incurred.

Thus, if an award were made solely on the basis of the schedule, the number of weeks awarded would be as specified in the statute and nothing additional would be paid for the permanent partial disability. A leg was valued at 50 months and entitled the worker to 50 percent of his wages (subject to the maximum) for 50 months. But if it were found that there were "residual physical disability to parts of the body other than the

members affected'' the commission could take these other factors into account and make an award on the ''body'' basis.

In cases of permanent partial disability not specified in the schedule, that is, nonscheduled injuries, the NIC was directed by the statute to determine the percentage of disability and each percent was to be paid one month at 50 percent of the worker's wage, subject to a maximum slightly lower than that allowed for scheduled awards. In determining the percentage of disability, the commission was to consider among other things the exact list of ''other factors'' as specified in the scheduled section.

During this period, the NIC made some use of the AMA *Guides* to determine the extent of impairment, but there were no rules, directives, or guides for the application of the other factors, nor for when the specified or nonspecified ratings were to be made. In seeking objectivity, Nevada in 1972 turned to the example of its neighboring state and adopted a modified form of California's schedule to be used in place of the rater's subjective evaluation of the ''other factors.'' The system was to be used only if it resulted in an increase in the award to the worker.

These changes proved to be unsatisfactory, and following a number of studies, the law was amended with changes that became effective July 1, 1973. Under the new law (NRS 616.605), disability and impairment of the whole man were declared to be equivalent terms. The law then went on to state:

> The percentage of disability shall be determined by the physician designated by the Commission, or board of physicians, in accordance with the current American Medical Association publication, *Guides to the Evaluation of Permanent Impairment.*

Further, ''No factors other than the degree of physical impairment of the whole man shall be considered in calculating the entitlement to permanent partial disability compensation.'' These provisions from the 1973 amendments continue substantially unchanged in the law that became effective July 1, 1982.

The 1973 statute provided that each 1 percent of impairment of the whole man was to be compensated by a monthly payment of one-half of 1 percent of the claimant's average monthly wage prior to injury. Effective July 1, 1981, that was changed to six-tenths of 1 percent. Liability for payments is to begin on the day of injury, or the day after

the last payment of temporary disability compensation, whichever is later. Payments are to continue on a monthly basis for a minimum of five years or until the 70th birthday of the claimant, whichever is later.

Compensation benefits are usually paid on a monthly basis, but may be paid annually to claimants who are receiving benefits of less than $100 a month. Claimants may receive up to $10,000, or one-quarter of the present value of their award, whichever is greater, in a lump sum.

Under the Nevada law, the maximum weekly wage used to calculate permanent partial benefits is 150 percent of the state's average weekly wage. The maximum monthly wage as of July 1985 was $2,159.33. Six-tenths of 1 percent of $2,159.33 is $12.96. Assuming that a worker entitled to the maximum monthly benefit had a 10 percent permanent partial award, he would be entitled to $129.56 per month. The same high-wage worker with a 60 percent award would receive $777.36 per month.

The monthly dollar amount of these awards for a 65-year-old worker and a 35-year-old worker with the same rating and earning the same wage would be exactly the same. However, the 65-year-old worker would receive these payments for 5 years, until age 70, whereas the 35-year-old worker would receive them for 35 years. The theory obviously is that wage-earning capacity has been impaired and compensation should be paid for the span over which wages would have been earned. Thus, the duration is for the rest of the worker's normal working life, which is presumed to end when he attains the age of 70.

Since Nevada's benefits are so crucially dependent on age, they are difficult to compare with those in other states. Obviously, the younger the worker, the greater the total amount received. The present value of the 60 percent award for the 35-year-old worker at maximum wages would be $136,433 discounted at 6 percent; for the 65-year-old worker, it would be $40,296. The latter's benefits would be received over five years, the minimum duration no matter what the age of the worker.

Lump-Sum Payments

When Nevada's law was amended in 1973, lump-sum payments were permitted only under specific conditions. If the total rating was 12 percent or less, a lump-sum payment was made on demand of the worker. For cases in which ratings totalled 13 percent or more, lump sums were to be allowed only "upon demonstration of a need which is substantiated by a comprehensive evaluation of possible rehabilitation." Ef-

fective July 1, 1979, a provision was added that up to one-quarter of a rating of 13 percent or more could be paid in a lump sum on demand. The practice has been to pay a lump sum, regardless of the percent rating, any time the value of the lump sum, which is a discounted figure that takes into account mortality rates, exceeds the total amount that would be due in installments. This occurs when the claimant's age is 56 years, 8 months or older.

When the law was again amended in 1981, the lump-sum provisions were further liberalized. Claimants injured after July 1, 1981, may receive up to $10,000 or one-quarter of the present value of their award (whichever is greater) as a lump sum without limitations on the percentage rating.

Permanent Total Disability Awards

Nevada uses a different and more usual method for calculating benefits for workers whose disability is adjudged as permanent total. The law (NRS 616.575) provides that certain specified injuries, in the absence of proof to the contrary, are deemed to be total and permanent: for example, the loss of sight of both eyes, the loss of two major limbs, an injury to the spine resulting in complete paralysis, and an injury to the skull resulting in incurable imbecility or insanity. The enumeration is not meant to be inclusive, and all other cases are to be determined in accordance with the facts presented. The permanent total benefit is calculated at two-thirds of the worker's preinjury wage, subject to a maximum weekly benefit of $332.46 as of January 1986 (U.S. Dept. of Labor, *State Laws*, 1986). This amount is payable for life, although the employee is required to file a report on any of his earnings on an annual basis, and presumably they would be deducted.

Hearing Procedure

Just as the law has changed to provide different methods of paying benefits, so has it changed in regard to hearing procedures. Before 1973, the NIC examined claims, decided on the benefits to be paid, and heard appeals of decisions of its own claims examiners. In 1973, the law added an appeals officer from the Department of Administration to hear appeals from Commission decision. In 1978, claimants could seek the services of the office of the State Industrial Insurance System attorney, and in 1979 the NIC was no longer authorized to hold any hearings on claims.

Under the law effective in 1982, claims examiners of SIIS investigate claims and, if there is no dispute, pay claims and close cases without any outside interference. Should a dispute arise, a hearing may be requested before a hearing officer of the Department of Administration, who will conduct a formal hearing at which the claimant may be represented by an attorney. From there, appeals may be made to the appeals officer (who is also from the Department of Administration), and thereafter to the court system.

Rehabilitation

At the time of our field visits in 1975 and 1976, there was great enthusiasm among the commissioner, staff, and representatives of interest groups about rehabilitation. It was seen as an NIC function that was just as important as the payment of benefits.

The chairman of the Commission at that time, John Reiser, was the most enthusiastic advocate of rehabilitation, and spoke of negotiations with employers to promote the possibility of rehabilitation for seriously injured workers. He argued that the claims person or the rehabilitation counselor could point out to the employer the reserves for medical and cash benefits that would have to be established and would eventually be reflected in the employer's insurance costs if workers were adjudged to be permanently and totally disabled, and could contrast these sums with the lesser sums involved in a rehabilitation program, which would be successful if employers agreed to take seriously injured workers back.

There can be no quarrel with the idea that return to the job is a primary goal of a workers' compensation program, but it is also true that rehabilitation programs are invariably beset by practical difficulties. These difficulties are apparent in Nevada, where experience has tempered initial enthusiasm. It has been difficult to select eligible candidates for rehabilitation, to decide on a program, to set limits on rehabilitation expenditures, and to motivate employees and employers.

The statutory provisions relating to rehabilitation have not changed in substance since 1973. NRS 616.222 provides:

> To aid in getting the injured workman back to work, to assist in lessening or removing any resulting handicap, the insurer may order counseling, training, or rehabilitation services for the injured worker regardless of the date on which such workman first became entitled to compensation.

Before services can be ordered, the worker and his physician must be consulted, and if the services involve a change in vocation, the consultation must include the employer and a rehabilitation counselor. Compensation benefits may be withheld if a worker rejects counseling, training, or other rehabilitation services offered by the insurer.

NRS 616.223 provides authority for cooperative agreements between SIIS and the rehabilitation division of the Department of Human Resources as well as other public and private entities. To avoid reliance on other agencies, SIIS employed rehabilitation counselors and nurses. In 1976, it completed the building of a rehabilitation center in Las Vegas with accommodations for 250 outpatients daily. The rehabilitation center is one of the four operating divisions of the SIIS.

The changes in the regulations tell a part of the story of the changes in rehabilitation practices. In its original form, under regulation 13 of the NIC, rehabilitation was defined to encompass a very broad range of services, from guidance to transportation allowances. Regulation 14.1020 charged the Commission with establishing "a program of rehabilitation for each industrially injured worker in need of and capable of benefiting from such service."

Although some latitude is still in place, later regulations sought ways to limit services, perhaps recognizing that "need" is insufficient guidance in light of the finiteness of resources allocated for rehabilitation. Regulation 14.004 states that rehabilitation means "assisting in the return of an injured worker to gainful employment, *at a justifiable cost*, within a reasonable time after he is injured or contracts an occupational disease" (emphasis added).

Section 14.015, dealing with eligibility for rehabilitation services, stipulates that in order to receive services a worker must be physically unable to return to his former job, and that if he is released by his physician without any job restrictions he is not eligible for services. Neither is he eligible solely on the grounds that the job he performed before his injury is no longer available.

Section 14.045 lists in order of priority the options for returning the disabled worker to gainful employment. The first is to place him in the job he held before injury; the second, to place him with the former employer in a job that accommodates his limitations; and third, to place him with another employer in a job that utilizes his existing skills. Last on the list is assisting in initiating self-employment or other means of employment. Only if these are not possible will training be considered.

In general, the regulations require the counselors to approach formal training and educational programs with caution. Rehabilitation services are to cease when the employer offers a job whose demands do not exceed any limitations defined by a treating or examining physician.

The thrust of the regulations is to provide services that will return the worker to a job and not necessarily to develop his fullest potential. The counselor is to provide a written rehabilitation plan to be explained to the worker, and a copy is to be sent to the worker's previous employer. The plan is to include a budget together with a justification for the expenses.

The rehabilitation programs are administered by a staff of rehabilitation counselors stationed in Las Vegas and in the northern part of the state. Ideally, each counselor works with a nurse employed by the SIIS and with a claims examiner. This three-person team functions as a so-called disability prevention team.

If the worker receives compensation for more than 42 days, the file is examined by the team to determine if services are needed. If necessary, the nurse or counselor confers with the attending physician or the claimant. If the medical advisor deems it beneficial, the claimant might be sent to the Las Vegas center for evaluation. If a case is accepted for rehabilitation, the individual written rehabilitation plan will be worked out by the counselor and approved by the supervisor.

The Lessons from Nevada

Nevada's example is interesting for three reasons. First and foremost, it clearly illustrates some of the difficulties likely to be encountered in trying to operationalize criteria for permanent partial disability benefits. Before 1972, Nevada drew the conventional distinction between scheduled and nonscheduled injuries. Scheduled injuries were rated strictly on an impairment basis. Nonscheduled injuries (and scheduled injuries that affected other parts of the body) were evaluated essentially on the basis of the loss of earning capacity, with the rating depending on factors that included the worker's age and occupation. The determination of the extent of loss of earning capacity was done on a case-by-case basis, which produced controversies and inefficiencies. From the next phase in Nevada, a brief one (1972-73), one innovation has survived: the distinction between scheduled injuries (those specifically enumerated in the statute) and nonscheduled injuries was dropped. Another innovation from that period, namely the use of a formula approach *a la* Califor-

nia to evaluate all injuries in terms of the extent of loss of earning capacity, was soon abandoned. (The California model is discussed at length in the next chapter.)

The approach used in Nevada since 1973 to pay permanent partial disability benefits is unique among jurisdictions we have examined. There is no distinction between scheduled and nonscheduled injuries. Rather, all injuries are rated on the basis of the extent of impairment or functional limitations as spelled out in the AMA *Guides to the Evaluation of Permanent Impairment*. These ratings are then turned into weekly benefit amounts by a formula. (The 1973 formula was slightly modified in 1981.) The ratings and the weekly benefit amounts pay no attention to disability factors, such as age, education, or occupation. Only two aspects of the Nevada scheme make it something other than a "pure" impairment approach: the weekly benefits are related to the worker's preinjury wage, and the benefits terminate when the worker reaches age 70.

Because these permanent partial benefits are paid for the "working lifetime," it is possible to see their purpose as being to compensate for loss of earning capacity: a presumably permanent loss calls for compensation to be paid on a regular basis throughout the injured person's entire working life. But such a goal gives way before the practicalities of administration and the desires of the parties. The worker anxious for immediate benefits, the attorney eager for his fee, and the administrator who wants to minimize his record keeping—all combine to press for lump sums. The 1981 amendments made these easier to obtain, so that today, for some workers, such as those who receive a lump sum and then die before age 70, the relationship between their benefits and the extent of their work disability is muted. The lump-sum practice moves Nevada closer to a "pure" impairment approach for permanent partial disability benefits, and away from an approach that compensates work disability.

The second interesting aspect of the Nevada experience is the state's changing rehabilitation program. The enthusiasm with which rehabilitation was embraced as a panacea has gradually dimmed with the recognition that rehabilitation, in common with many other purposes, is subject to economic constraints. Not all injured workers can benefit from rehabilitation, and the SIIS, like others concerned with these problems, faces the task of choosing those who can be motivated to complete programs devised in light of cost-effective priorities.

One reason why a more free-wheeling system of rehabilitation—with claims persons bargaining with, cajoling, and threatening employers to take back workers—is not possible leads to the third interesting aspect of Nevada's experience. In 1973, the NIC was the exclusive insurer, the insurance rate fixer, the initial determiner of benefits, and the appellant level. These functions, in the interest of due process and equity, have been separated. This diffusion of authority since 1973 has made it more difficult in Nevada to mount a whole-hearted campaign to pursue any goal, including the promotion of rehabilitation.

Perhaps when all is said and done, the importance of Nevada lies in its unique method of assessing permanent partial disability. The state should continue to be monitored to determine if an objective AMA *Guides* type of evaluation can, despite the obstacles and difficulties outlined above, succeed in providing an efficient and equitable method of awarding permanent partial benefits.

Ohio[3]

Introduction

Ohio is an exclusive-fund state with a large number of self-insured employers. The Ohio Industrial Commission—a three-member panel appointed by the governor, with one member representing employees, another employers, and the third, the public—supervises the district hearing officers, the Regional Boards of Review, and the so-called "C-92 Section," which handles applications for percentage ratings of permanent disability. Most administrative functions are the responsibility of a separate unit, the Bureau of Workers' Compensation, which is headed by an administrator. The Bureau is responsible for claims and disbursements from the state fund and supervision of claims from the self-insured sector. It maintains claims records and rates employers for premium purposes for policies issued by the state fund.

The time span of our research encompasses two periods of major upheaval in the Ohio Workers' Compensation Program. The first culminated in action by the governor and the legislature in 1976 that largely affected administrative structure and procedure. The second resulted in wholesale statutory changes in 1986 that, *inter alia*, changed the type of benefits available to workers with permanent partial disabilities. As discussed below, the significance of the 1986 benefit changes is not yet clear, and for that reason we concentrate on the benefit scheme in effect before the latest set of changes.

rganizational Change

Our field work in Ohio was conducted in 1975 and 1976 at a time when the administration of the law was under investigation and scandals were threatening the stability of the workers' compensation program. One lengthy study, the *Report of the Joint Select Committee on Workmen's Compensation*, recommended several basic reforms of the program. One of these was redirection of the role of the medical practitioner toward objective evaluation of impairment and sound medical treatment. The report criticized the administration of the act and the absence of published policies and operating guidelines.

At the time of our field work, responsibility for the rather complex administration of the Ohio law was divided between the Commission and the Bureau. In the evaluation of permanent partial disability the medical unit played a crucial role, and we noted that the Bureau's and the Commission's shared control of that unit caused some tension. We also commented that beyond the great confusion induced by the apparently complex organization and the investigations, the process of determining the disability ratings was not guided by any well-known rules, regulations, or standards. "The agency's physicians make determinations in a manner that is apparently understood by them and some of the examining physicians, but that understanding is not widely disseminated. There are no extensive statistical data published as to the results and very little information as to the consistency of the awards that are made" (Berkowitz, Burton, and Vroman 1979, p. 234).

Because of allegations of abuse and fraud, the chairman of the Ohio Industrial Commission was removed by the governor in 1976. This action was followed by over 200 indictments and many subsequent convictions. A legislative investigation culminated in the passage of S.B. 545, which mandated specific management reforms at the Bureau and the Commission. These have since been carried out.

Overlapping responsibilities of the Bureau and the Commission were eliminated. The Bureau is the administrative body and the Industrial Commission is the adjudicative and policy-making body. Each agency has control over its own personnel, physical space, and budget. The reforms were designed to strengthen the political independence of the Bureau personnel and the commissioners. The Bureau's administrator, who formerly served at the pleasure of the governor, was given a fixed six-year term. The Industrial Commission members were limited to two

terms in office. Employees of the Bureau of Workers' Compensation were placed under the classified civil service system.

Rules, procedures, and decisions of both the Bureau and the Commission were formalized and opened for public review and comment. Managerial improvements such as the introduction of electronic data processing and systematized rules and operating procedures were made. We note some of these changes below, and will discuss the evaluation guidance now given physicians to aid them in assessing the percentage of permanent partial impairments.

Procedures

For employers insured under the state fund, the Bureau of Workers' Compensation makes the initial determination on all uncontested claims. The Bureau, which also monitors self-insurers, has a central office in Columbus, and 16 district offices. The central office's claims section maintains the claims file and sets hearings for contested claims.

There are five Regional Boards of Review (O.R.C. 4123.14), each composed of three members: a representative of employers, a representative of employees, and a chairman who must be admitted to the practice of law in Ohio. The regional boards are under the jurisdiction of the Industrial Commission and are to follow uniform rules of procedure established by the Commission. The Industrial Commission determines appeals from the regional boards, and also determines applications for permanent partial awards.

If a claim is contested, the hearing on the matter is conducted by the district hearing officer, who is an employee of the Industrial Commission. Appeals from the orders of the district hearing officer may be taken by either party, and if the employee was unrepresented at the hearing, the administrator may appeal to the Commission. The Commission then assigns an appeal to a Regional Board of Review, which holds an informal hearing. New evidence, not presented to the District Hearing Officer, is allowed; the administrator is represented at the hearing.

Regional boards are given 60 days to decide the case or demonstrate reasonable grounds for delay to the Commission. Any dissatisfied party, or the administrator, can file an appeal with the Industrial Commission, which is given sole discretion to decide whether to accept the appeal. Most cases are accepted. When the appeal is not accepted, the regional board's order becomes a final order and may be appealed directly to the Court of Common Pleas (O.R.C. 4123.51a).

In addition to the appeals function, the Industrial Commission has original jurisdiction over settlements, permanent total cases, and safety violation awards. Staff hearing officers may hear such matters of original jurisdiction with an appeal of right directly to the Industrial Commission.

Types of Permanent Partial Disability Benefits[4]

There were three types of benefits available to workers with permanent partial disabilities in Ohio prior to the 1986 statutory amendments. The new law eliminated one type of benefit and created another, which "appears to be a substitute for the [type of benefit] the bill eliminates."[5]

Scheduled permanent partial benefits were retained by the 1986 amendments with some modifications. Previously these were provided by Sec. 4123.57 division C. The "old" benefits were for durations that depended on the nature and severity of injury (such as 60 weeks for a loss of a thumb), with the weekly benefit set at 66 2/3 percent of the worker's preinjury wage, subject to maximum and minimum weekly benefit amounts of 50 percent and 25 percent of the state's average weekly wage. These "old" scheduled benefits were in effect as of January 1986 and thus are the Ohio entries in the tables in chapter 5. The "new" Ohio scheduled benefits are moved to division B of Sec. 4123.57 and the maximum and minimum weekly benefit amounts are 100 percent and 40 percent of the state's average weekly wage. The durations of the scheduled benefits were not changed.

A second type of benefit was also retained by the 1986 amendments with some modifications. Previously these were provided by division B of Sec. 4123.57, and were sometimes referred to as "paragraph B awards." Under the new law, the benefits are moved to division A; in order to reduce confusion, we will refer to them as "C-92 awards" or "permanent partial awards," which are terms commonly used in Ohio. Previously the weekly benefit was 66 2/3 percent of the worker's preinjury wage subject to a maximum weekly benefit of 33 1/3 percent of the state's average weekly wage. The duration was a percentage of 200 weeks, with the percentage determined by the extent of the worker's disability. None of these provisions were changed by the 1986 law, although, as discussed below, the relationship between permanent partial awards and other types of benefits was modified. The permanent partial (or C-92) awards are essentially based on the extent of the worker's permanent impairment or functional limitations, and are the primary concern of the balance of this chapter.

The third type of benefit has changed as a result of the 1986 amendments. The old law provided in division A of Sec. 4123.57 a type of wage-loss benefit that the employee would choose instead of the C-92 or permanent partial awards; these benefits were commonly referred to as "temporary partial" disability benefits, although that term was not in the statute. The 1986 amendments eliminated these temporary partial disability benefits and added a new type of wage-loss benefit in division B of Sec. 4123.56. The new wage-loss benefits are not an alternative to a C-92 or permanent partial award; rather, the worker cannot receive a permanent partial award until 40 weeks after the termination of the new wage-loss benefit. Because both the old and new version of the third type of benefit are types of wage-loss benefits, we defer extended discussion until chapter 8.

Permanent Partial or C-92 Awards. Division A (previously division B) of Sec. 4123.57 provides that the Commission "shall determine the percentage of the employee's permanent disability . . . based upon that condition of the employee resulting from the injury or occupational disease and causing permanent impairment evidenced by medical or clinical findings reasonably demonstrable." Note that the Commission is to fix the *disability* percentage based upon the *impairment* that results from the condition, which in turn is the result of the injury. Although the terms are not used exactly as we have developed and defined them in chapter 1, they are quite similar, as will be seen from the evaluation guidance provided to physicians by the Commission.

The provision that established the "permanent partial award" (old division B) came into the law in 1941 in response to dissatisfaction with the "temporary partial" awards (old division A). Apparently, it became difficult to disassociate wage losses due to the conditions of the labor market from those due to the employee's medical condition. The complaint was that workers abused the provision. Employers sought some alternative, and employee groups were willing to accept percentage awards based on physical impairment because they eliminated the requirement to file periodic wage statements and undergo periodic medical examinations. In time, the impairment method became the prevailing method of assessing permanent partial disability in Ohio.

Applicants may file for permanent partial awards 40 weeks after last payment of temporary total benefits or 40 weeks after date of injury, whichever is later.[6] The claims are filed on Form C-92, hence the common name for these awards.

When a C-92 application is filed, the claimant is examined by an Industrial Commission physician, whose report becomes part of the file. The rules provide that the employer may have the claimant examined at the employer's expense. Self-insurers are likely to do this, and in such cases three physician reports may be presented at the hearing—the report from the physician of the Industrial Commission and reports from physicians retained by the employee and the employer.

The C-92 unit processes the claim. When there is substantial disparity (defined as 15 percent or more) among physicians' reports, a party may request a deposition from the physician. This is done at the expense of the requesting party, under the supervision of an attorney designated by the Industrial Commission's legal director.

If there is agreement on the percentage of permanent partial disability it is possible to waive a hearing, although this is not usual. Hearings are conducted by a district hearing officer in the various District Offices. The hearing is informal, and the only issue is the percentage of impairment. Physicians usually do not appear, but the hearing officer listens to arguments based on the medical evidence in the record. If there is substantial disparity among ratings, the hearing officer may refer the claimant to a specialist for examination. No payment is made until there is a final order.

The determination of permanent partial disability is exclusively within the Commissioner's jurisdiction. The Commission's decision may not be appealed to court (O.R.C. 4123.51a). It can be challenged only by a party filing a writ of mandamus, which requires the Commission to perform its legal duty to make or not make the percentage award. The Commission's decision will be upheld by the Court if there is some evidence to support the decision.[7]

Permanent Total Disability

Ohio's statute (O.R.C. 4123.58) provides for a scheduled type of permanent and total disability for "loss or loss of use of both hands or both arms, or both feet or both legs, or both eyes, or any two thereof." The award is to be paid in addition to any scheduled award for permanent partial disability. The statute does not otherwise define permanent and total disability, but provides that in cases of permanent and total disability, benefits based on 66 2/3 percent of preinjury wages, subject to the maximum of 100 percent of the state's average weekly wage, are payable for life. As of January 1986, the maximum was $365 per week.

"Nonscheduled" permanent total claims (those not involving the specified losses of body parts, such as both hands) are evaluated only after 200 weeks of temporary total compensation have been paid. The evaluation process is similar to that followed for permanent partial awards, with a great deal of reliance on medical findings. The final decision rests with the Industrial Commission, which must decide if the impairment has caused the worker to be unfit for sustained remunerative employment.

Providing Evaluation Guidance

At the time of our field work investigations, we observed that physicians who evaluated physical impairments in order to aid the hearing officers in fixing the physical disability rating were provided with little or no evaluation guidance. The 1976 reforms specifically provided that the Industrial Commission's medical section was to "issue a manual of Commission policy so as to increase consistency of medical reports" (O.R.C. 4121.38). The Ohio *Medical Examination Manual* (1981) defines terms commonly used in determining impairment ratings, examines the role of the examining physician in workers' compensation law, and, in general, provides guidance to the physician in the evaluation of permanent partial impairments.

The manual makes clear that the examining physician will be asked to perform two types of examination. In one, the physician is asked whether a particular condition is related to an identifiable occupational injury or occupational exposure. For the second type of examination, the physician is asked to state the percentage of impairment caused by the allowed injury or disease.

The Ohio *Medical Examination Manual* (1981, pp. 1-2) points out that the terms *disability* and *impairment* are not synonymous:

> "Impairment" is a medical term measuring the amount of the claimant's anatomical and/or mental loss of function as a result of the allowed injury/occupational disease. The examining physician evaluates impairment.
>
> "Disability" is a legal term indicating the effect that the medical impairment has on the claimant's ability to work. Disability is determined by the Industrial Commission and its hearing officer.

The Commission's definition of impairment combines our concepts of impairment and functional limitations, but its definition of disability is similar to ours in emphasizing the ability to work. The Commission stresses that disability is a legal concept and not a medical concept.

Physicians are told that they may choose any established guide, such as the AMA *Guides* (1984) or McBride's *Disability Evaluation* (1942), to decide on the percentage of impairment. They are asked to indicate which guide was used.

The opinion is to be expressed both as a degree and as a percentage of the entire body. The degree ranges from minimal (which is equivalent to 0-10 percent) through low, low moderate, high moderate, high, and maximum (which is rated at 85-100 percent).

The manual also discusses the physician's role in evaluating schedule losses. If there is an amputation, the loss is to be stated in definite anatomical terms and specifically noted as a scheduled loss. The physician is also asked to determine, however, if the claimant has a permanent partial impairment over and above the scheduled loss. The example cited in the Ohio *Medical Examination Manual* (1981, p. 8) is that of a claimant who has totally lost the vision in one eye due to an injury: "That would be a scheduled loss. If he/she suffers from a constant 'tearing' of that eye, he/she may have permanent partial impairment over and above the scheduled loss."

The issuance of such a medical rating manual shows a commendable willingness to assume the responsibility for providing evaluation guidance. Of course, no approach will satisfy everyone. The Ohio AFL-CIO's *Workers' Compensation Manual* (Jaffy and Smith 1981), for example, remains critical of the physician's rating of impairment, noting that different doctors use different approaches to evaluate disability and that doctors who do a great deal of disability evaluation are the ones familiar with the methods used. But the range of disagreement is probably lessened given the changes in Ohio's law.

Summary

There is little doubt that Ohio's permanent partial awards (C-92 awards) belong squarely in our category I. But despite the clear directives to physicians to this effect and supporting legal opinion,[8] some important ambiguity remains. An unanswered question is whether the district hearing officers are to take into account the "other factors"

that, combined with the impairment, may result in the disability. Presumably they may, although no guidelines are offered. Interestingly enough, the AFL-CIO's *Manual* instructs the union representative that if there is some dispute over the amount of the award, it will be helpful to have the injured worker present at the C-92 hearing. The representative is advised that the hearing officer will ask whether the claimant is working regularly and whether he is earning the same amount as before, or less, or more (Jaffy and Smith 1981, p. 82). This question pertains to the extent of dissability,not just the extent of impairment. On the other hand, it is significant that the union representatives are advised to seek a medical specialist's examination in the event of a dispute; they are not advised to hire vocational experts.

Perhaps the Ohio handling of permanent partial awards only proves that impairment evaluation is an oblique way to operationalize a desire to compensate for actual or putative wage loss, and that even if the process begins by measuring the extent of the physical impairment, factors relevant for determining the extent of disability slip into the evaluation process.

Procedurally, Ohio does not go as far as California, which has a separate rating bureau, but it combines aspects of a rating bureau with aspects of New York's hearing system. Although a hearing can be waived, almost all C-92 cases come before a hearing officer. If there is no medical dispute, the hearing may be perfunctory. The advantage of such a procedure is that, combined with the examination by the Industrial Commission's doctor, it could bring about uniformity in evaluation, with a consequent improvement in equity. The banning of appeals concerning the extent of disability shows promise of promoting efficiency. What is necessary to make such a system truly equitable and efficient is detailed evaluation guidance. The physician's manual disseminated following the 1976 amendments is a step in the right direction. More detailed evaluation guidance should allow Ohio to improve further the efficiency of the program.

NOTES

1. New Jersey's law was approved April 4, 1911, to become effective on July 4, 1911. Three states enacted laws before New Jersey—Kansas and Washington on March 14, 1911, and Nevada on March 23, 1911—but of these laws, only Nevada's became effective before New Jersey's, since it went into effect on July 1 of that year. Nevada's act, however, applied only to specific employments, and it was superseded by another act in 1913. To complicate matters further, Wisconsin, which passed its act after New Jersey, put its statute into effect immediately upon adoption. New Jersey's law is, at any rate, the oldest statute from point of enactment that has remained in effect (Berkowitz 1960, p. 3).

2. *Dwyer v. Ford Motor Company*, 36 N.J. 487 (1962).

3. We are indebted to Richard J. Levine, attorney to the administrator, for providing information and useful insights.

4. The material in this subsection is based in part on material from Young (1984), sections 7.4.1 and 7.11-7.7.17.

5. The passage is from an analysis of S.B. 307 prepared by the Ohio Legislative Service Commission staff. The lack of certainty about the role of the new benefit suggests that a clear understanding of the new Ohio benefit scheme must await time and court interpretations.

6. Under the 1986 amendments, there is also a minimum of 40 weeks between the last payment of the Section 4123.56 wage-loss benefits and eligibility for permanent partial awards under Section 4123.57 division A.

7. *State, ex rel. Manley v. Industrial Commission*, 66 Ohio St. 2d 40, 417 NE 2d 1375 (1981).

8. "Permanent partial awards differ from most other types of compensation in that they are not a substitute for wages or an award for impairment of earnings capacity. Like scheduled loss-of-member awards this award is designed as a 'general damage' type of compensation, aiming to compensate a worker for loss of physical or mental function" (Nackley 1985, sec. 14:5).

Chapter 7
Nonscheduled Benefits in Loss of Wage-Earning Capacity (Category II) States

In this chapter we consider California, the District of Columbia, and Wisconsin, jurisdictions in which the basis for nonscheduled permanent partial awards is the loss of wage-earning capacity. These jurisdictions differ considerably in their approaches. California is particularly notable because it does not make the conventional distinction between scheduled and nonscheduled injuries (a feature that was examined in chapter 5).

California

Types and Levels of Benefits

Cash benefits in California fall into the classifications of temporary total, temporary partial, permanent partial, permanent total, and death benefits. In addition, medical care and rehabilitation services are provided. For our purposes, the temporary and permanent disability benefits are most relevant.

(a) Temporary disability benefits. Temporary disability benefits are paid during the recovery period following an injury or onset of a disease. Benefits do not begin in California until four days after the employee leaves work, although the waiting period is eliminated if the employee is hospitalized. Benefits for the waiting period are paid retroactively if the period of disability is at least 22 days. A worker eligible for temporary total disability benefits normally receives two-thirds of his preinjury average earnings, subject to minimum and maximum benefit rates that were $112 and $224 per week as of January 1986. This maximum was only 62 percent of the state's average weekly wage; only six other states had maximum weekly benefits that were as low relative to their average weekly wages (U.S. Dept. of Labor, *State Laws Compared*, Forthcoming 1987).

(b) Permanent partial disability benefits. A worker who experiences a permanent impairment as a result of a work-related injury or disease is eligible for permanent disability benefits. An impairment is considered permanent when it persists after the worker has reached maximum improvement, or when his condition has been stationary for a reasonable period of time. Permanent disability benefits are paid in addition to temporary benefits.

In determining the percentages of permanent disability, *Labor Code* Section 4660 provides that "account shall be taken of the nature of the physical injury or disfigurement, the occupation of the injured employee, and his age at the time of such injury, consideration being given to the diminished ability of such injured employee to compete in an open labor market." The section also provides that a schedule shall be adopted for determining the extent of permanent disabilities, and that the schedule shall be *prima facie* evidence of the percentage of disability.

The schedule is used to evaluate the extent of the injury, providing what roughly amounts to an impairment rating, and then to modify the rating by the worker's age and occupation. These factors are introduced to reflect the varying impact of a particular injury on the future ability to compete in the open labor market among workers who differ in age and occupation. As will be discussed later, there is more to the determination of the extent of permanent disability in California than a mechanical application of the schedule. The complexities result from the presence of discretion in the application of the schedule; the fact that the disability rating is only *prima facie* evidence, which can sometimes be successfully challenged; and the ability of the parties to avoid the use of the schedule in the determination of permanent disability benefits.

A worker with a permanent disability rating between 1 and 99.75 percent is eligible for permanent partial disability benefits. The worker receives progressively more weeks of benefits as the size of the rating increases, according to a formula in *Labor Code* Section 4658, shown in table 7.1.

The cumulative number of weeks increases with the severity of the disability, as shown in table 7.2. The benefits are based on two-thirds of the worker's wage, subject to a weekly minimum and maximum that were $70 and $140 in January 1986.

Table 7.1
Duration of Permanent Partial Benefits in California

Percentage range of disability rating	Number of weeks of benefits for each 1 percent of disability in range
Under 10	3
10–19.75	4
20–29.75	5
30–39.75	6
50–69.75	7
70–99.75	8

Table 7.2
Cumulative Duration of Permanent Partial Benefits in California

Percentage of permanent disability incurred	Cumulative number of benefit weeks	Percentage of permanent disability incurred	Cumulative number of benefit weeks
5	15.00	55	276.00
10	30.25	60	311.00
15	50.25	65	346.00
20	70.50	70	381.25
25	95.50	75	421.25
30	120.75	80	461.25
35	150.75	85	501.25
40	180.75	90	541.25
45	210.75	95	581.25
50	241.00		

Workers whose disabilities rate 70-99 percent receive a life pension at the end of the permanent partial benefit period. The pension is computed at 1.5 percent of average weekly earnings for each percent of rating above 60 percent. Thus a worker with an 99 percent rating would receive 39 x 1.5 or 58.5 percent of his wage, subject to a weekly maximum of $64.21 in January 1986. (The maximum of $64.21 could only be received by a worker with a 99 percent rating. Workers with lower ratings receive lower benefits.)

(c) Permanent total disability. Total permanent disability benefits are to be paid for life. The loss of both eyes, or the sight thereof, the loss of use of both hands, an injury resulting in "practically total paralysis," and an injury to the brain resulting in incurable imbecility or insanity are conclusively presumed to be total in character. All other cases are to be determined individually. As shown in table 3.6, permanent total cases are relatively uncommon in California compared to other states.

Permanent and total disability benefits are based on two-thirds of the worker's wage with a maximum as of January 1986 of $224 per week, the same as in the case of temporary total disabilities.

The Delivery System for Workers' Compensation

The California workers' compensation program is a direct-payment system, which means that a worker eligible for the benefits can receive the benefits without prior approval by the state workers' compensation agency.

Although the obligation to provide workers' compensation benefits is on the employer, most employers secure this obligation by purchasing insurance from a carrier that assumes much of the employer's administrative responsibility. In California, insurance can be purchased from the State Compensation Insurance Fund (the largest state fund in the country) or from private insurance carriers. Employers can self-insure if they obtain a certificate of self-insurance, and many of the state's largest employers have qualified. Public agencies are also permitted to administer their own workers' compensation programs.

Administrative Organizations. The primary responsibility for administering the California workers' compensation program lies with the Division of Industrial Accidents, which includes the Workers' Compensation Appeals Board. The Department of Industrial Relations, in which the Division of Industrial Accidents is included, also houses the

Division of Labor Statistics and Research, which is responsible for the collection and analysis of the employers' and doctors' first reports of work injuries. The administrative director of the Division of Industrial Accidents and the members (commissioners) of the Workers' Compensation Appeals Board are appointed by the governor and are subject to senate confirmation. The director serves at the pleasure of the governor, and the members of the Appeals Board have four-year terms.

The director of the Division of Industrial Accidents appoints all personnel in the division except the seven members of the Appeals Board. Among the most important appointments are the workers' compensation judges, who make the initial decisions in contested claims. There are 125 workers' compensation judges staffing 21 offices of the Workers' Compensation Appeals Board (U.S. Dept. of Labor, *Administration Profiles*, 1985).

The director also appoints the chief of the Disability Evaluation Bureau, the medical director, the chief of the Rehabilitation Bureau, and the chief of the Information & Assistance (I & A) Bureau. The Disability Evaluation Bureau employs disability evaluation specialists throughout the state who serve the offices of the Workers' Compensation Appeals Board. These disability evaluation specialists prepare formal permanent disability ratings in litigated cases and also, when requested by the employer or carrier and the injured employee, informal consultative evaluations. The I & A Bureau has responsibility for the Benefit Notice Program, which prepares a statistical analysis of such matters as promptness of payment of workers' compensation benefits. The Medical Bureau provides medical examinations of injured employees—either by staff physicians or by "independent medical examiners"—at the request of the judges and commissioners of the Workers' Compensation Appeals Board.

The Workers' Compensation Appeals Board is part of the Division of Industrial Accidents, but is independent of the administrative director of the Division in its judicial functions. The initial hearings in disputed cases are held in the 21 district offices of the Board. The appellate level of the Workers' Compensation Appeals Board is located in San Francisco. The Appeals Board consists of seven members, known as commissioners, of whom five must be attorneys. One member of the Appeals Board is appointed chairman by the governor.

Administrative Procedures. A worker who suffers a work-related injury is supposed to serve written notice on the employer within 30 days

after the occurrence of the injury in order to maintain a claim for compensation (*Labor Code* Section 5400). However, a formal notice is not required from the employee when the employer has knowledge of the injury. In the normal case, the employer, or a foreman, or some other person in authority will be aware that the employee has been injured or has claimed an injury, and therefore the employee's obligation to provide written notice is not applicable (Swezey 1985, sec. 4.5).

The 30-day period for a notice has been held to start running only when the employee knows, or should know, that he has suffered an injury of industrial origin. In occupational disease and cumulative injury claims, the "date of injury" is that on which disability is first suffered and the employee had knowledge, or by the exercise of reasonable diligence should have had knowledge, that the disability was work-related (Swezey 1985, sec. 4.3).

Although an employer is not required to provide notice to state agencies of minor injuries to his employees, any injury that requires medical services other than ordinary first aid treatment or causes absence from work for a full day or beyond the shift of the day of the injury must be reported to the Division of Labor Statistics and Research. The first reports do not, however, become part of the records of litigated workers' compensation cases.

Physicians are also required to report instances of initial treatment—both medical-only and time-loss cases—to the insurer or self-insured employer. A copy of each report is then sent to the Division of Labor Statistics and Research.

In cases of work injuries that result in more than three days of lost time or that require hospitalization, the employer is required to submit a notice of commencement of benefits, or a notice explaining why benefits have not been paid, to the Division of Industrial Accidents under the Benefit Notice Program.

In the vast majority of cases involving a work injury that results in more than three days of lost time, requires hospitalization, or results in death, the employer accepts liability for cash benefits. The employer must file a First Notice of Work Injury with the Division of Labor Statistics and Research, and a notice of commencement (and subsequently a notice of termination) of benefits with the Benefit Notice Program in the Division of Industrial Accidents.

In disputed cases, a party files with the Board an application for adjudication, an original compromise and release agreement, or a stipulation with request for award. Each requires action by a workers' compensation judge.

Litigation normally is initiated with the filing of the application, usually by a worker or his representative, with the appropriate office of the Workers' Compensation Appeals Board. In the application, the party seeks a judicial determination of his rights under the law. The application is often filed before the case is ready to go to hearing. For example, an application may be filed for a worker who is severely injured shortly after the date of injury, requesting permanent disability benefits. (Often—in some years in more than 50 percent of the filings—the worker's application is the employer/insurer's first notice of injury.[1]) The determination of the extent of the disability cannot be made, however, until the injury is permanent and stationary, and therefore a hearing would be premature. An application for adjudication is not moved toward a hearing stage unless a form is also filed indicating that the case is ready to proceed to the hearing. A case may proceed to a hearing immediately after filing because a "declaration of readiness to proceed" is filed with the application, or the application may first be put on an inactive status and then moved to the hearing stage after a declaration of readiness.

After the parties are ready to proceed to a hearing, the Appeals Board usually holds some sort of pretrial conference to determine whether in fact a dispute exists, and, if so, whether the parties are ready to try the dispute or are willing to resolve it by voluntary agreement. If the parties do not resolve the issue voluntarily, the matter is set for a hearing before a workers' compensation judge. Although hearings do not adhere to all of the technical rules of evidence used in the court system, they nonetheless are formal and all parties are usually represented by attorneys.[2] The hearings usually rely on written medical reports, although the parties have a right to present medical evidence during the hearing and to cross-examine doctors who have filed written reports. Following the hearing, if the extent of permanent disability is an issue in the case, the workers' compensation judge may obtain a formal rating from the Disability Evaluation Bureau. The judge also may refer the case to an independent medical examiner (IME) or to an agreed medical examiner (AME), selected by the parties and approved by the judge; this examiner provides additional medical evidence to assist the judge in resolving conflicting evidence. The judge, after the hearing and after

receipt of any additional medical evidence, issues a decision. Unless it is appealed by one of the parties, this decision is the final step in the case.

Formal cases that begin with an application for adjudication and result in a hearing and decision by a workers' compensation judge represent the clearest example of litigation. There are, however, other types of formal cases considered litigated because they involve a workers' compensation judge. For example, the parties may file an original compromise and release, which represents a complete agreement between the parties on all issues. The compromise and release, which releases the employer from any further liability in exchange for the benefits provided in the settlement, is normally approved by the workers' compensation judge without a hearing.

Another type of formal case, also counted as a litigated case, is one with stipulated findings and award. When an application has been filed and the parties feel that a hearing is not necessary to resolve the issues, a stipulated statement of facts may be filed, signed by all parties in interest, giving consent to the immediate issuance of an award. The Board then makes its findings and award based on the stipulation, or sets the matter for a hearing to take testimony, or conducts a further investigation into the matter (Swezey 1985, sec. 5.41). Ordinarily, stipulations are used when the parties agree on all or most facts, but disagree on the amount of permanent disability award, or prefer to avoid a contested hearing for reasons of economy or convenience.

Any party to a workers' compensation case may appeal the decision of a workers' compensation judge to the Workers' Compensation Appeals Board by filing a petition for reconsideration within 20 days of the issuance of award. When a party files a petition for reconsideration, the workers' compensation judge who issued the decision has 15 days in which to prepare a report and make a recommendation on the petition (Swezey 1985, sec. 10.37). After the judge has prepared the report, the file is forwarded to the Workers' Compensation Appeals Board, where it is assigned on an automatic-rotation basis to three members of the Appeals Board for consideration. The Appeals Board has 30 days from the date of the filing of the petition to act, although one 30-day extension is permitted. The three members of the Appeals Board may grant reconsideration and receive additional evidence, or grant reconsideration and issue an immediate decision based on the evidence in the case file, or deny reconsideration. The majority of peti-

tions for reconsideration are denied at this stage. In addition, sometimes the Appeals Board grants reconsideration of a case but then upholds the decision made by the workers' compensation judge.

After the decision of the Workers' Compensation Appeals Board, the parties have 45 days to file a petition for review with an appropriate appellate court. These petitions for review have numbered about 600 annually in recent years, although there was a drop to 522 in 1985.[3] The court of appeals may grant the petition and set the matter for oral argument, which was done in 61 cases in 1985, or deny the petition without opinion. If the petition is granted, the awards are sometimes annulled.

The final step in the appellate procedure involves a petition for a hearing by the California Supreme Court, of which there were 153 in 1986. Petitions must be filed within 10 days after the opinion of the court of appeal becomes final, and are likely to be unsuccessful: only nine were granted in 1985.

Procedures for Permanent Disability Benefits—Voluntary Cases. Until the late 1960s, an employer could decide the appropriate amount of permanent partial disability benefits on the basis of medical evidence in its files, and the Division of Industrial Accidents (DIA) did not have to approve the amount of the payments or otherwise become involved in the case. This procedure was known as self-rating. The current procedure for voluntary cases requires that the Disability Evaluation Bureau of the Division of Industrial Accidents prepare an informal rating for every case. After the worker's injury becomes permanent and stationary, the employer sends him a Form 200, which asks the employee to describe the effect of the injury on his work. This form is returned to the employer, who submits it along with Form 201 (the employer or carrier request for an informal rating) and all medical evidence in the employer's file to the Disability Evaluation Bureau.

A disability evaluation specialist in the Bureau examines the forms and medical records and, if these are adequate, prepares a description of the disability and a rating of the extent of disability. If either party is dissatisfied with the rating, the Evaluation Bureau will reconsider the rating on request, or suggest that an application be filed for a hearing (Swezey 1985, sec. 16.43). If the informal rating is acceptable to both parties, the payment of compensation due under the rating is made directly to the employee.

Informal ratings are primarily used for minor injuries. Cases with serious injuries that began with informal ratings typically are later converted into litigated (or formal) cases. Even in informal cases, however, an attorney may be involved, and when this occurs, the informal rating is sent to a judge to "endorse" a reasonable attorney's fee (Swezey 1985, sec. 16.45).

Procedures for Permanent Disability Benefits—Litigated Cases. A litigated case begins with the filing of an application for adjudication (Form 1) by the claimant, which states the basis for the benefits claimed and the nature of the disagreement. When the claimant is ready to move forward on the case, a Declaration of Readiness to Proceed (Form 9) is filed.[4] A party can request a hearing on one of three calendars: conference pretrial, rating pretrial, or regular. The presiding workers' compensation judge in the Appeals Board office having jurisdiction over the case decides whether the case is ready to be placed on a calendar and, if so, on which calendar (Swezey 1985, secs. 6.17, 6.25).

The conference calendar is used for cases that the presiding workers' compensation judge does not believe should be directly sent to a hearing. In cases that are in a preliminary stage, the judge uses the conference to define the issue, to get an exchange of medical reports, or otherwise to move the case along. In cases in which the judge feels a resolution of the issues is imminent, the conference is used to try to reach an agreement. If that effort is unsuccessful, the case is sent to a regular hearing.

The rating pretrial calendar is often used when the extent of permanent disability is the primary issue. A disability evaluation specialist in the Disability Evaluation Bureau reviews the medical records and estimates the extent of disability. The rating (or often ratings, since the medical records obtained by both the employee and employer are rated) is prepared in advance by the disability evaluation specialist (Swezey 1985, sec. 6.6).

A number of outcomes of a conference pretrial hearing or a rating pretrial hearing are possible. The parties may reach a complete agreement and sign a compromise and release agreement (subject to the judge's approval), or they may reach a partial agreement and submit stipulated findings and a request for award to the judge for his resolution of remaining issues. If the parties do not reach an agreement, the case proceeds to regular hearing. A regular hearing may either follow a pretrial hearing or be the first hearing in the case. In either event the case is

assigned to a workers' compensation judge, who assumes the roles of finder of fact and decider of legal issues.

The judge prepares a full description of the disability, basing the description on the medical evidence in the record and on the worker's testimony at the hearing. The judge's description of the disability is sent to the Disability Evaluation Bureau. A disability evaluation specialist prepares a rating of the disability and computes the number of weeks of disability payments, the weekly rate of compensation, and the total sum of payments due (Swezey 1985, secs. 16.50-16.55).

The disability evaluation specialist is required to make a recommendation solely on the information provided by the judge. The specialist can neither consider factors that are not included in the instructions nor disregard factors that are included. The recommendation is based on the specialist's independent judgment, the rating schedule, and published guidelines developed by the Evaluation Bureau (Swezey 1985, sec. 16.54).

The report of the disability evaluation specialist is evidence but not a conclusive finding of fact; therefore, it is not binding on the judge. The judge, however, will rarely disregard the percentage of disability recommended by the specialist. If the judge feels the rating is inappropriate, he may revise his instructions and ask the disability evaluation specialist to prepare a new rating for the case.

The specialist's report is returned to the judge and served on the parties. Any corrections or appeals of the rating must be pursued within seven days. If any party is dissatisfied with the recommended rating, several remedies are available.

When the dissatisfaction with the recommended rating stems from the judge's description of the factors of permanent disability in the instructions to the Evaluation Bureau, the dissatisfied party may do one of two things. He may write to the judge indicating his specific disagreements with the description and requesting that the matter be referred again to the disability evaluation specialist with amended instruction; or he may file a motion to strike the recommended rating, again indicating his specific disagreements with the judge's instructions. If the judge does not amend the instructions or approve the motion to strike, after a decision is issued in the case, it can be appealed by the dissatisfied party.

If the party is satisfied that the judge has properly described the factors of permanent disability, but dissatisfied with the percentage disability as calculated by the disability evaluation specialist, he then files a request to cross-examine the specialist and to submit rebuttal evidence. A party has a right to this cross-examination, but the subject matter of the cross-examination is carefully prescribed. The disability evaluation specialist may only be cross-examined about the procedure used to rate the factors included in the judge's description, and cannot be asked whether the judge's description is appropriate on the basis of the information in the medical records.

After receiving the rating from the Disability Evaluation Bureau and disposing of any objections to the rating, the judge issues findings and award. The written decision specifies the award and includes the reasons for the decision. This is the final determination of the case, unless one or both parties files a petition for reconsideration within 20 days, in which case the appellate procedure previously described becomes applicable.

Other Dispositions. The previous subsection discussed formal cases (cases in which a regular hearing is held). This section discusses two other types of dispositions that require involvement by a judge: stipulated findings and awards and compromise and release agreements. Use of a stipulated findings and award or a compromise and release agreement, either as the initial filing or as the resolution of a case that originated with an application for adjudication, accounts for the great bulk of the California formal cases.

The compromise and release agreement is used when the parties are in agreement about the disposition of the case. The parties complete a form that indicates the salient facts and the agreed settlement of the case. The form is submitted to the Workers' Compensation Appeals Board for approval. A judge reviews the proposed settlement and normally approves the parties' agreement. When the claimant is represented by an attorney (as is almost always the pattern in compromise and release cases), the judge is particularly likely to accept an agreement between the parties. Occasionally, the judge will use the Disability Evaluation Bureau to rate the permanent disability on the basis of medical evidence in the file.[5]

The consequences of a compromise and release agreement are twofold: The claimant receives his benefits in a lump sum, and the employer is released from any future liability for medical care and compensation

for the work-related injury or disease. There are exceptions to that rule, but they are limited. Occasionally, the lump sum paid by the employer to terminate his liability is not immediately paid to the employee, but placed in a trust that pays the amount to the employee over an extended period. Also, occasionally a case is appealed or reopened after the compromise and release agreement is approved. The possibilities for reopening or appeal are for the most part limited, however, to situations involving fraud, duress, or mistakes of law or fact (Swezey 1985, secs. 13.52, 13.55).[6] As a practical matter, a compromise and release agreement reached by the parties is very likely to be found acceptable by the judge, and once it is approved by a judge it is very unlikely to be disturbed thereafter.

The stipulated findings and award is commonly used by the parties in one of two situations. The parties may be in complete agreement on the facts and issues, but may not want to terminate the possibility of future benefits. Thus, they may agree to the amount of temporary total and permanent disability benefits to be paid, and, in addition to stipulating those amounts, provide that future medical benefits will be paid as appropriate. The stipulated findings and award is also used when the parties agree on most issues and do not believe a regular hearing is necessary to resolve the remaining issues. For example, the parties may themselves resolve all issues except the extent of permanent disability, and agree that the judge should refer that issue to the Disability Evaluation Bureau for a rating. The judge will then issue a decision on the permanent disability issue based on the disability evaluation specialist's report.

The consequences of the stipulated findings and award are somewhat different from those of the compromise and release agreement. As with the compromise and release, the employee may receive his benefits in a lump sum or periodic payments. Unlike the compromise and release agreement, however, the stipulated findings and award does not preclude future benefits for the case. This is obviously the result in a stipulated findings and award that provides for future medical benefits. Less obvious, however, is that the stipulated findings and award (as well as the findings and award issued in a litigated case) is subject to reopening for additional cash benefits if the injury results in new and further disability within five years of the original injury.

Criteria for Permanent Disability Benefits in California

The California criteria are complex and their history is tangled; they are only summarized here.[7]

The California approach to determining the extent of disability is unique among American workers' compensation jurisdictions. For one thing, the California workers' compensation statute does not include a traditional schedule. Instead, the statute gives the administrative director of the Division of Industrial Accidents the authority to adopt a schedule for the determination of the percentage of permanent disabilities. The California schedule is also unusual because it considers factors other than the nature of the injury in determining the degree of disability. These factors, the procedure for adopting the schedule, and the significance of the schedule are included in statutory language that has been virtually unchanged since 1917, when the original statute effective in 1914 was amended to require consideration of the worker's diminished ability to compete in an open labor market when determining the percentage of permanent disability.[8]

> Section 4660. (a) In determining the percentages of permanent disability, account shall be taken of the nature of the physical injury or disfigurement, the occupation of the injured employee, and his age at the time of such injury, consideration being given to the diminished ability of such injured employee to compete in an open labor market.
>
> (b) The administrative director may prepare, adopt, and from time to time amend, a schedule for the determination of the percentage of permanent disabilities in accordance with this section. Such schedule shall be available for public inspection, and without formal introduction in evidence shall be *prima facie* evidence of the percentage of permanent disability to be attributed to each injury covered by the schedule.

The 1914 California schedule used a hypothetical "standard man" as a reference point for the occupational and age adjustments made to the standard rating of the injury. The standard occupation was a ditch digger. For the standard age, the 1910 census in California was used. After certain actuarial adjustments were made, the average worker was found to be 39 years old. Thus the standard man used in the 1914 schedule was a 39-year-old ditch digger (laborer).

The 1914 schedule contained 52 occupational classifications. The standard rating was increased or decreased depending on whether the physical demands for each occupation were relatively greater or less than those for the standard man for the part of the body involved. Similarly, if

a worker were over 39, the disability rating was increased, and if under 39, the rating was decreased. Thus the 1914 schedule determined for each case a permanent disability rating based on the nature of the worker's injury, the particular occupation, and age at the time of injury.

The basic approach adopted in the 1914 schedule has remained largely intact to the present day. Minor amendments were made before World War II.[9] After World War II, because of concern that the schedule might have become outdated, an extensive review of the California permanent disability rating system and of alternative rating procedures was conducted and a report was submitted to the Industrial Accident Commission (the predecessor of the Workers' Compensation Appeals Board) in 1947. The 1950 revision that resulted did not disturb the basic concepts found in the 1914 schedule. The standard man, on whom the occupational adjustments are based, had been a laborer in the original schedule, but this specific occupation was abandoned in favor of a standard man who was in a generalized occupation, with average physical demands on all parts of the body. The age of 39 was retained for the standard man, as was the original plan of increasing the rating for older workers and decreasing it for younger workers, and there were some revisions in the standard ratings for injuries "in the light of analysis and Mr. Haggard's [superintendent of the Permanent Disability Rating Bureau] experience" (Welch 1964, p. 18).

The 1950 schedule is still in use. There have been some amendments, but the 1986 schedule is still essentially the 1950 schedule, which, in turn, is an obvious descendant of the 1914 schedule.

The current edition of the schedule, published by the administrative director in 1978, is 82 pages long. It is supplemented by a rule of the director (Sec. 9725) that the objective factors of disability be rated by methods described in a standard text (discussed below). The schedule also incorporates "work capacity guidelines" for the evaluation of troublesome injuries (such as back, heart, and pulmonary cases). Use of these various materials allows every injury and disease to be rated.

Each injury is given a standard rating based on the medical factors. For example, the loss of one leg at or above the ankle but below the knee receives a standard disability rating of 50 percent.[10] If the worker is a carpenter, his rating is increased to 62 percent because the schedule is based on the assumption that an amputation of the leg of a carpenter is more disabling than the same loss for an average worker. Standard ratings are increased for workers over 39 and decreased for workers

under 39 on the assumption that older workers require more time to adjust to handicaps, or, if necessary, to find new employment. If the carpenter is 45 years old when injured, his rating is increased to 64 percent. The standard rating, modified by the occupational and age adjustments, is used to determine the amount of permanent disability benefits the carpenter receives.

Determination of the standard rating is often more difficult than the carpenter example suggests, in part because there are three sets of standards or criteria used to rate permanent disabilities in California: objective factors, subjective factors, and work-capacity guidelines (Swezey 1985, secs. 16.21-16.24).

Objective Factors. The measurement of objective factors is governed by Section 9725 of the Rules issued by the administrative director of the Division of Industrial Accidents.

> Section 9725. *Method of Measurement.* The method of measuring physical elements of a disability should follow the Report of the Joint Committee of the California Medical Association and Industrial Accident Commission, as contained in *Evaluation of Industrial Disability* edited by Packard Thurber, Second Edition, Oxford University Press, New York, 1960.

The Thurber volume resulted from an effort in 1940 to establish some uniformity in the measurement of impairments. It had become obvious by then that doctors were arriving at widely varying assessments of the extent of impairment for similar or identical injuries, resulting in widely varying standard disability ratings for identical or similar injuries.

A committee chaired by Dr. Packard Thurber, with representatives from the California Medical Association, the Industrial Accident Commission, and other agencies, prepared the guidelines for evaluation. The committee based its work on several principles: that the guidelines should be brief and not unduly complicated; that the evaluation procedures already used by the Industrial Accident Commission should be followed as much as possible; and that the relevant concept for determining restricted motion was the worker's remaining active (or functional) motion, not his passive motion.

The Thurber volume differs from the AMA *Guides to the Evaluation of Permanent Impairment* in several ways. The Thurber volume is confined to assessment of injuries to the musculoskeletal system.

whereas the AMA Guides deal with all body systems, including the cardiovascular and digestive systems. For the musculoskeletal system, the Thurber approach is roughly the same as the AMA approach; they both concentrate on the objective manifestations of impairment, such as restricted motion or ankylosis.

Subjective Factors. The California permanent disability rating standards also consider subjective manifestations of impairment. These are known in California as "subjective factors" (Swezey 1985, sec. 16.23) and are explained in Section 9727 of the Rules issued by the administrative director of the Division of Industrial Accidents.

> Section 9727. *Subjective Disability.* Subjective Disability should be identified by:
>
> 1. A description of the activity which produces disability.
> 2. The duration of the disability.
> 3. The activities which are precluded and those which can be performed with the disability.
> 4. The means necessary for relief.
>
> The terms shown below are presumed to mean the following:
>
> 1. A *severe* pain would preclude the activity precipitating the pain.
> 2. A *moderate* pain could be tolerated, but would cause marked handicap in the performance of the activity precipitating the pain.
> 3. A *slight* pain could be tolerated, but would cause some handicap in the performance of the activity precipitating the pain.
> 4. A *minimal* (mild) pain would constitute an annoyance, but causing no handicap in the performance of the particular activity would be considered as nonratable permanent disability.

The California *Schedule for Rating Permanent Disabilities* lists a number of injuries evaluated on the basis of subjective factors. The range of standard disability ratings for the injuries evaluated on this basis can be considerable: several injuries receive 20 percent ratings for "slight" disability and 100 percent for "severe" disability. Despite the language of Section 9727, the schedule does not confine consideration of the subjective factors to pain, nor are the only ratable categories "slight, moderate, and severe." Thus headaches receive a standard rating of

5 percent if slight; a 15 percent rating if moderate; 60 percent if severe; and 100 percent if pronounced. Neurosis adds the category "very slight," which receives a standard rating of 10 percent. Epilepsy contains the category "slight to moderate," which receives a standard rating of 50 percent. A "moderate" epilepsy receives a standard rating of 75 percent, and since a rating may be increased or decreased from the scheduled ratings when the degree of impairment so warrants, an epilepsy more serious than "slight to moderate" but less serious than "moderate" might be rated as a 60 percent or 65 percent disability.

There appears to be a potential for inconsistent ratings of similar injuries in this California schedule, especially when the disability evaluation specialist must rely on descriptions in the reports from doctors (or the instructions from the workers' compensation judges) that may not correspond, in an unambiguous fashion, to terms like "moderate" or "slight." The potential for inconsistency was probably greater prior to the development of the work-capacity guidelines described below. These guidelines are at least partial substitutes for the "minimal-slight-moderate-severe" approach for several important types of injuries such as back injuries.

Part of the impetus for the use of work-capacity guidelines in place of the subjective disability approach was a 1953 report of the California Senate Interim Committee. The report contains a section entitled "Incredible Inconsistencies in Rating Specialists' Computations."

> The claim by the rating specialists of the commission that ratings are consistent, one with another, is pure fiction. Called upon separately by us to rate a set of hypothetical cases, two specialists arrived at amazingly different rates. The test cases included twelve (12) disabilities of varying degrees of severity, each case to be rated for four (4) different occupations and all cases at age 39 years. For not one of these forty-eight (48) cases did the specialists arrive at the same rating. . . . For the forty-eight (48) cases, the average difference between ratings is 12.05 percent; the average difference in payment periods, 48 weeks; and in terms of cash benefits, the average difference between cases (at $30 per week) is $1,440. (1953, pp. 60-62)

The Senate Committee also selected 24 actual ratings from case files. These 24 cases were resubmitted to the same rating specialist who made the original computations. Three of the cases showed the same percent-

age on rerating as indicated on the original rating, but six reratings were higher than the original rating and eleven were lower. (The other four cases showed ranges on the original rating or the rerating, and all four cases involved some change between the original rating and the rerating.)

Although the Senate Committee did not confine its criticism to ratings involving subjective disability, it was obviously concerned about the subjective rating system,[11] and the committee's criticism was probably an important factor in the development of the work-capacity guidelines.

The subjective factors can be considered examples of subjective manifestations of impairment, as those terms were defined in chapter 1. They carry the California criteria for evaluating permanent disability beyond the factors considered by the AMA *Guides* or the factors covered in the Thurber volume. There is, however, no published guide to aid in the evaluation of the subjective factors other than the descriptions "severe," "moderate," "slight," and "minimal" contained in Section 9727 of the rules. Thus the Permanent Disability Rating Bureau's *Fundamentals for Applying the California Schedule for Rating Permanent Disabilities* (1967) contains rather detailed instructions for rating objective factors, but for subjective factors contains only general statements such as "if subjective factors were present, a percentage would be added to the rating for objective factors. The amount to be added would depend on the nature and effect of the subjective factors, consideration being given to scheduled ratings." The only other assistance to the rating of subjective factors is the verbatim reproduction of Section 9727 of the Rules defining pain.

Work-Capacity Guidelines. "In the 1950s, work-capacity guidelines were developed by the Rating Bureau to overcome a lack of uniformity and consistency in ratings" (Swezey 1985, sec. 16.24). As an example of the ratings problems the guidelines were designed to deal with, the discussion from Welch is instructive. "Initially the schedule provided only three ratings for the spine: slight (30%), moderate (50%), and severe (100%). It did not define these levels, and obviously all spinal disabilities could not be rated on only these three points. The guidelines were evolved to permit more precise ratings on spinal disabilities, and the definitions of work capacity were developed in relation to spinal disabilities only" (Welch 1973, sec. 15.17). The work-capacity guidelines since have been extended to other types of injuries, but their origin as a method to rate spinal disabilities is evident.

The Rating Bureau's work-capacity guidelines have eight levels, or "plateaus," of disability. Four of the plateaus are described below:

(a) "*Disability precluding very heavy lifting*—contemplates the individual has lost approximately one-quarter of his pre-injury capacity for lifting." This receives a standard rating of 10 percent. A note to this guideline elaborates: "A statement 'inability to lift 50 pounds' is not meaningful. The total lifting effort, including weight, distance, endurance, frequency, body position and similar factors should be considered with reference to the particular individual."

(e) "*Disability precluding heavy work*—contemplates the individual has lost approximately half of his pre-injury capacity for performing such activities as bending, stooping, lifting, pushing, pulling and climbing or other activities involving comparable physical effort." This receives a standard rating of 30 percent.

(g) "*Disability resulting in limitation to semi-sedentary work*—contemplates the individual can do work approximately one half the time in a sitting position, and approximately one half the time in a standing or walking position, with a minimum of demands for physical effort whether standing, walking or sitting." This receives a standard rating of 60 percent.

(h) "*Disability resulting in limitation to sedentary work*—contemplates that the individual can do work predominantly in a sitting position at a bench, desk or table with a minimum of demands for physical effort and with some degree of walking and standing being permitted." This receives a standard rating of 70 percent.

The predecessors to these current guidelines were used informally from the 1950s by the Disability Evaluation Bureau, first to rate spinal injuries, later to rate a few additional categories of injuries. The guidelines were formally incorporated into the *Schedule for Rating Permanent Disabilities* for injuries occurring on and after January 1, 1970, for chronic infections of the pulmonary tissues, heart disability, spinal disabilities, and abdominal weakness. Following an appellate court decision, the two most severe plateaus (g and h above) were added to the schedule as a basis for evaluating injuries to the lower extremities that occurred on or after January 1, 1973.

Several aspects of the work-capacity guidelines do not displace, but only supplement or complement, the subjective rating factors in the *Schedule for Rating Permanent Disabilities*. For example, the guideline

for disability number 18 (neck, spine, or pelvis) provides alternative methods to obtain a standard rating of 10 percent: either a work-capacity rating of "disability precluding very heavy lifting" or a subjective factor rating of "constant slight pain." Moreover, disability number 18.1 (impaired function of the neck, spine, or pelvis) has a standard rating of 100 percent for a subjective factor rating of severe, "and this rating can be given even though the maximum plateau in the work-capacity guidelines is a 70 percent standard rating."

Second, aside from the use of the subjective factors as an alternative to the work-capacity guidelines, the guidelines themselves can be approached in two ways: in terms of the work restrictions named by the plateau designations (e.g., *disability precluding heavy work*) or in terms of the activities that the worker can still do after the injury or can no longer do because of the injury ("contemplates the individual has lost approximately half of his pre-injury capacity for performing such activities as bending, stooping, lifting, . . .").

Finally, what is being evaluated by the work-capacity guidelines? Using the terminology of chapter 1, we consider the "objective factors" in California to be objective manifestations of impairment. The work-capacity guidelines are not so easy to classify. Certain of the guidelines' descriptions of the precluded activity correspond to functional limitations, that is, limitations in generalized (or nonwork-specific) activities such as walking, climbing, and bending. However, most of the plateau designations (for example, *disability resulting in limitation to semi-sedentary work*) and some of the guidelines' descriptions (for example, the descriptions of plateaus g and h quoted above) correspond to work disability. Thus the quest for more consistency in evaluating injuries as a result of the criticism of the use of subjective factors had led to more categories (eight plateaus in place of the three levels of subjective disability included in Section 9727 of the Rules) and the use of criteria that consider the consequences of injury further downstream in the injury-impairment-functional limitation-disability sequence shown in chart 1.2.

Final Elaborations. A few additional elaborations on the rating of permanent disabilities are needed. First, it should be stressed that "objective factors," "subjective factors," and "work-capacity guidelines" are not mutually exclusive categories. Rather it is quite common for an injury to have rating factors from more than one category, such as an injury to the wrist that causes restriction of motion and loss of grip. (See Swezey 1985, sec. 16.30, for such an example.)

Second, the discussion of the use of the schedule indicated some opportunities for the exercise of discretion in the rating of injuries. To a much more limited extent, a disability evaluation specialist has some discretion in the choice of the occupation to be used in adjusting the standard rating. This opportunity is more likely to arise if the worker has an occupation that does not fall on the list of occupations included in the *Schedule for Rating Permanent Disabilities*. The specialist can then turn for guidance to the "Outline of Occupational Groupings," a 16-page document published by the Division of Industrial Accidents but not a part of the schedule.

Preliminary Observations on the Criteria for Permanent Disability Benefits in California

Several observations can be made about the criteria for permanent disability benefits in California. One is that it has been some time since the schedule has been carefully reviewed to determine if it provides a meaningful guide to the evaluation of permanent disabilities. The last thorough review took place in the 1940s, and culminated in a schedule that celebrated its 35th anniversary in 1985. The schedule has had some revisions since 1950, including changes in the occupational adjustments in the 1960s and the introduction of the work-capacity guidelines in the 1970s. Nonetheless, the basic approach and most age and occupational adjustments have not been carefully scrutinized recently.[12] In light of such significant labor force developments in the last 30 plus years as the reduction in retirement age, the increasing participation of women in the labor force, and the shift from blue-collar to white-collar jobs, many of the age and occupational adjustment factors may be obsolete. Indeed, the starting point for the age and occupational adjustments—a 39-year-old worker with average physical demands on all parts of the body—may no longer be appropriate.

Another observation is that the California rating system for permanent disabilities is complex and difficult to learn. The same injury may be rated on more than one factor (for example, an injury to the wrist may have objective and subjective factors). Moreover, a worker may have multiple injuries, and there are rules for combining the ratings of injuries to the same extremities (see Swezey 1985, sec. 16.34) and of injuries to different parts of the body (see Swezey 1985, sec. 16.35). The rules are designed to avoid "pyramiding"—straight addition of the ratings for multiple injuries to an extremity, which could result in a

permanent disability rating in excess of the rating for the amputation of the member even when the extremity maintains substantial function.

There are also special rules to deal with overlapping. "One disability is said to 'overlap' another when it does not reduce the employee's ability to compete in an open labor market beyond the limitation that resulted from the other disability. If the disabilities do not completely overlap, then additional compensation is payable to the extent that the second disability further restricts his ability to compete" (Swezey 1985, sec. 16.40).

Another set of rules is used for apportionment. Apportionment is used when a worker with a preexisting disability experiences a work-related injury or disease; California permanent disability benefits are paid only for the increased extent of disability due to the new injury or disease. (See Swezey 1985, secs. 16.38-16.39.)

Given these complexities, it is no surprise that considerable time and effort must be invested in order to learn the rating system. Disability evaluation specialists in the Disability Evaluation Bureau are given six months of training and need still more time to master the intricacies of the system. Representatives of all the interest groups interviewed in California for this project (including workers' compensation judges, Workers' Compensation Appeals Board commissioners, plaintiffs' attorneys, defense attorneys, and employers) expressed doubts about whether the other parties in the system really understood the intricacies of the rating system. Most admitted they themselves did not understand all the details of the system.[13]

Another observation on the California criteria for rating of permanent disabilities is that the rating procedure is not mechanical, but leaves considerable room for the exercise of discretion with no objective criteria. The greatest potential for discretionary handling is in deciding what factors are to be rated. For example, in a case with conflicting medical evidence and testimony about the extent of an injury to the spine, someone must decide whether the evidence supports a conclusion that the pain is "constant slight to moderate" or "constant moderate." That decision is worth 20 percentage points on a standard rating and (depending on the worker's age and occupation) about 120 weeks of benefits. The work-capacity guidelines, introduced to overcome a lack of consistency in rating such injuries, may provide some assistance to the person who must evaluate the conflicting evidence. Still, the difference between standard ratings of 30 percent and 50 percent reduces to a deci-

sion whether the injury results in limitations to "light work" or to "semi-sedentary work." The workers' compensation judge, faced with a typical file in a soft tissue back injury case, replete with conflicting and ambiguous medical evidence and with a record of a hearing with testimony that is less than totally persuasive, not only *can* exercise his discretion to decide whether the disability is to be described by factors that rate at 30 percent or 50 percent (or even a higher or lower figure), he *must* exercise that discretion.[14]

Although the exercise of discretion is most obvious in the decision about which factors are to be rated, other kinds of discretion are also possible in applying the schedule. The rules for rating multiple injuries, or subjective factors, for example, are not mechanical. Moreover, most injuries are not precisely on the schedule, and the disability evaluation specialist must exercise his discretion in rating these injuries or diseases.[15]

Another observation concerns the difference between the California schedule and the American Medical Association's *Guides to the Evaluation of Permanent Impairment*. The AMA *Guides* are concerned primarily with objective manifestations of impairment, but the California schedule considers subjective manifestations of impairment (the "subjective factors") and functional limitations and work disabilities (the "work-capacity guidelines"). In this sense, the California criteria for rating permanent disabilities are much more extensive than those of the AMA *Guides*. However, the AMA *Guides* are at least as broad, if not broader, in terms of the number of body systems covered. The objective factors in California are largely confined to the musculoskeletal system; coverage of body systems other than the musculoskeletal system is often cursory or incomplete, compared to the AMA *Guides*.[16] The *Guides*, for example, devote chapters to the digestive system and the reproductive and urinary systems; those systems are not even covered by the California schedule. In practice, injuries or diseases that affect these body systems may be compensable in California as nonscheduled disabilities. But the *Schedule for Rating Permanent Disabilities* by itself is a limited guide to the evaluation of permanent impairment compared with the AMA version.

The Lessons from California

California provides a unique answer to the question of what criteria should be used to provide permanent partial disability benefits. The conventional distinction between scheduled and nonscheduled injuries has

never been used in California. Instead, all injuries are evaluated by use of a comprehensive schedule that purports to measure the loss of earning capacity by a formula, that incorporates information on the nature and severity of the injury plus the worker's age and occupation.

The use of a formula approach to determine the extent of loss of earning capacity might be expected to reduce the extent of litigation and to keep costs of permanent disability benefits under control. The lower costs should result because there appears to be less room to exercise discretion and bend the rules in a way to help an especially deserving worker when the benefits are calculated using an "objective" formula. The control of permanent disability benefit costs seems especially likely in California, since the maximum weekly permanent partial disability benefit was only $70 from 1972 to 1982, was $130 until the end of 1983, and then reached its current level of $140 in January 1984. Not only might permanent disability benefits be expected to be relatively inexpensive, but the cost of the entire program could be expected to be low because of the generally meager cash benefits. The maximum weekly benefit of $224 for total disability that has been in effect since 1984 represents only 62 percent of the state's average weekly wage.

The record in California largely contradicts these expectations. Almost all permanent partial disability cases involve litigation, in the sense of lawyers being used to help determine the amount of benefits. The legal assistance does not come cheap: a survey of carriers indicated that the total cost of litigating a claim in California was $3521 per case in 1984, which amounted to 43 percent of the $8137 average payment in disputed cases that year. These litigation expenses included attorneys' fees for both parties, the cost of forensic medical reports or testimony, and related costs, such as depositions. The study provided a "rough estimate" that "litigation in California's no-fault workers' compensation system is—conservatively—a $600 million-plus annual industry."[17] Although not all of these cases involve permanent partial disabilities, such claims are the most common since 59 percent of the litigated cases involved the application of the work capacity guidelines to back, heart, and psychiatric injuries.

Another dashed expectation is that California has contained the costs of permanent partial cases. Despite a relatively low share of all costs accounted for by permanent total cases (table 3.14), the high costs of permanent partial cases in 1982 made the California share of all costs accounted for by permanent disability cases the highest among the eight

states with comparable data that we are intensively examining (table 3.17 and graph 3.1). California has been edged from this top position among the eight jurisdictions only once since 1958 (table 3.17). Moreover, as of 1982, all permanent disability cases (including permanent total, major permanent partial, and minor permanent partial) accounted for 82.11 percent of all cash benefits in California, a figure exceeded only in Rhode Island (84.21); below this odd couple were 43 jurisdictions (table 3.5).

The expectation of low costs of workers' compensation for employers is also contradicted by the data. From 1958 to 1984, the costs of workers' compensation insurance in California have consistently been above the national average; in the latter year, California ranked first among the 10 jurisdictions we are examining, with insurance costs more than 40 percent above the national average (table 3.18).

With all this litigation, a high share of benefits going to permanent disability cases, and substantial workers' compensation insurance costs, one would at least expect the benefits to be adequate and equitable for workers who are permanently disabled. However, this expectation is also contradicted by the results from our "wage-loss study" and by a recent study by the California Workers' Compensation Institute, discussed in chapters 10 and 11, respectively.

What explains these results, such as the extensive litigation and the high cost of permanent partial disability benefits in California? One factor may be the litigious environment that characterizes the state, especially the Los Angeles area; workers' compensation is only one example of the pervasive reliance on the law suit to solve disputes. This tendency is reinforced by the passive nature of the workers' compensation agency. As noted by Tebb (1986, p. 46), traditionally most of the agency resources have been devoted to providing the parties a forum to resolve their disputes, rather than administering a system that has as its *raison d'etre* the prevention of disputes. The total budget of the agency is only $37 million (table 4.1), only about 6 percent of the estimated $600 million cost for litigation. Moreover, most of the budget pays for the administrative law judge teams located throughout the state (Tebb 1986, p. 46), rather than the record keeping, monitoring, and evaluation functions central to an active workers' compensation agency. California is the very model of myopic efficiency described in chapter 2.

Still another explanation of California's record is that the "objective" formula used to determine the amount of permanent partial disabili-

ty benefits is not all that objective. As this chapter has documented, there is considerable room for the exercise of discretion in application of the schedule. Where money is at stake in the exercise of discretion, there shall ye find lawyers.

The procedures and criteria for permanent disability benefits are not the only factors that explain the high costs of workers' compensation insurance in California. Vocational rehabilitation expenses increased 228 percent over the most recent five-year period with available data, and exceeded $115 million in 1983.[18] Medical benefits were estimated to account for 28.8 percent of net premiums in 1986, and their cost "has increased significantly and steadily since 1970" (California Study Committee Staff *Report* [hereafter CSCS *Report*], 1986, pp. 20-21). But even though these other factors are significant, permanent disability benefits are a major source of concern in California and have been a central part of recent reform efforts.

The most recent significant change in the California workers' compensation program occurred in 1982, when the maximum weekly benefit for permanent partial disability was increased from $70 to $140. This change and others were estimated to increase costs to employers by nearly $1 billion and may represent "the largest benefit increase in the history of workers' compensation" (Tebb 1986, p. 47). Nonetheless, with minor exceptions, "the 1982 amendments did little to make the California compensation program more equitable, effective, or efficient" (Tebb 1986, p. 45). The central features of the 1982 amendments were a buttressing of the exclusive remedy doctrine to protect employers from tort suits; in exchange, benefits were increased, with 90 percent of the new benefit dollars allocated to permanent partial disability, "leaving maximum weekly benefits for total disability, both temporary and permanent, woefully inadequate. . . . The 1982 benefit increases magnify the maldistribution of California workers' compensation benefits" (Tebb 1986, p. 47).

The concern over maldistribution of benefits and the high costs of the program led the Division of Industrial Accidents in early 1985 to propose a wage-replacement approach in place of the present criteria for permanent partial disability benefits (13 *CWCR* 57, April 1985). By September of 1985, the wage-replacement approach (nee the wage-loss approach discussed in chapters 8 and 9) was incorporated into a proposal sponsored by the Californians for Compensation Reforms (CCR), a coalition of employers and carriers. But there were outspoken

objections to the CCR proposal, and the bill died in an assembly committee in January 1986 (14 *CWCR* 1, Feb. 1986).

The next month (February 1986), a significant examination of workers' compensation was issued as a staff report by the Joint Study Committee on Workers' Compensation (*CSCS* Report 1986).[19] The report examined the cost of workers' compensation in California, as well as the extent of litigation, the history of permanent disability benefits, and the current criteria and procedures for permanent disability benefits. The present approach was criticized in many respects, and issues and recommendations for reform were presented using the framework included in chapter 10 of this study.[20] Compensation for both work disability and nonwork disability ("personal loss") was endorsed in principle, which led to a recommendation for a dual system of permanent benefits. Operationally, the *Report* (p. 78) recommended that "work disability should be compensated directly by providing benefits when there are actual wage losses," while the separate benefit for the other consequences "should be based on the nature and extent of the permanent impairment or limitations."

The CSCS *Report* was criticized by some, including the California Applicants' Attorneys Association (14 *CWCR* 167, July 1986), but served as an input to a bill introduced by State Senator Bill Greene, chairman of the Senate Committee on Industrial Relations in Summer 1986. The Greene proposal (SB 1617) did not substitute wage-loss benefits for the current permanent partial disability benefits, but provided a "supplemental PD benefit" for seriously injured workers who experience actual wage loss after their benefits expire (14 *CWCR* 143, June 1986). This is a variant of the hybrid benefits found in New York (discussed in chapter 8 and endorsed in chapter 12). SB 1617 died in the Senate Committee on Industrial Relations in August 1986, but is expected to be the basis for a new legislative proposal in 1987.

District of Columbia

The principal employer in the District of Columbia is, of course, the federal government, whose employees are covered by the Federal Employees' Compensation Act. Until 1982, the private sector employees in the District were covered by the Longshoremen's and Harbor Workers' Compensation Act, a federal statute that remains in effect for employees throughout the nation who are engaged in longshoring and related activities, or who are working on the outer continental shelf

or certain defense bases. The council of the District of Columbia, under the home rule provisions granted to the District by Congress, passed the "District of Columbia Workers' Compensation Act of 1979" (Act 3-88) to replace the Longshoremen's Act for private sector employees in the District and the District government's own employees. Although the District of Columbia Act was passed on May 14, 1980, because of court challenges it did not become effective until July 26, 1982.

We will examine some of the factors that led to the enactment of the District's new law, and note some of the differences between it and the Longshoremen's Act. We also provide a brief review of some of the initial consequences of the new law.

The Dynamics of Change

Some of the factors that explain the emergence of the new law in the District of Columbia are beyond the scope of this study—for example, the residents' increasing interest in self-governance and Congress's increased willingness to cede some of its traditional control over the capital. But some of the factors are internal to the workers' compensation program itself, and deserve a brief examination.

One part of the story concerns the surging importance of permanent disability benefits, and especially major permanent partial disability benefits, after 1968. In that year, major permanent partial cases accounted for only 3.43 percent of all cases in the District, less than the national average share of 4.38 percent. Then for 20 years, the jurisdiction's major permanent partial cases billowed, so that by 1978 they accounted for 13.75 percent of all cases in the District—a share that was more than 2 1/2 times the national average share of 5.14 percent for these cases. (All data from table 3.7.)

Superimposed on this explosion in the number of major permanent partial disability cases was an equally dramatic change in benefit levels. As previously noted, until 1982 the District of Columbia was covered by the provisions of the Longshoremen's and Harbor Workers' Act. In 1972, as a result of an agreement among various parties in the maritime industry, the benefits under the Longshoremen's Act were substantially increased in exchange for limits on employers' liability from suits outside the workers' compensation law. The private sector employers in the District of Columbia were "beneficiaries" of the reform agreement, even though the problem of suits outside the workers' compensation law did not involve them. As an example of the benefit in-

creases that resulted from the 1972 legislative package, the maximum weekly benefits for total and partial disability in the District of Columbia went from $70.00 in January 1972 to $167.00 a year later and to $318.38 by 1976. Because the maximums automatically increase as wages increase, the weekly maximums reached $426.40 by 1980.

The higher maximums translated into higher average costs for permanent disability cases in the District. In 1968, before the increase in maximums resulting from the 1972 legislation, major permanent partial cases cost an average $11,987, about 20 percent above the national average. By 1973 the average for major cases was $17,242, some 30 percent above the national average. By 1978 the District average of $38,266 for major permanent partial cases was 78 percent above the national average (table 3.11). Because, as noted above, major permanent partial cases were becoming numerically more prevalent during the 1968 to 1978 period in the District, the average costs for all permanent disability cases spiraled. In 1968, the average cost of all permanent disability cases in the District was $4,707, some 39 percent above the national average; by 1973, the average of $10,711 in the District was more than twice the national average of $4,599; by 1978, the District average was more than three times the national average—$24,933 vs. $8,178 (table 3.13).

Two consequences of these developments concerning the numbers and average costs of permanent disability cases are worth noting. By 1978, permanent disability costs accounted for 81.73 percent of all cash benefits in the District of Columbia, a figure exceeded only by Alaska. Not only did permanent disability benefits account for a goodly share of the pie, the pie had grown through time. One measure of the cost of the workers' compensation program in the District of Columbia is the percentage of payroll devoted to workers' compensation insurance premiums by a representative sample of employers. In 1972 the premiums for District of Columbia employers were 0.737 percent. By 1978, the U.S. average cost of workers' compensation insurance was 1.420 percent, but District of Columbia employers were paying 3.502 percent of payroll for premiums, the highest rate in the nation (table 3.18).

The pressures for change that arose from these developments led the District of Columbia to enact its own workers' compensation law.

Comparisons of the Old and New Laws

Maximum Benefit Levels. The Longshoremen's Act provides a maximum weekly benefit rate fixed at 200 percent of the national average weekly wage. As of 1980, the maximum amounted to $426.40 per week; the 1986 maximum under the Longshoremen's Act is $595.24. The new District of Columbia Act reduces that maximum to 100 percent of the average weekly wage of insured employees in the District, which made the maximum $431.70 in 1986. That maximum applies to all benefits for disability and death, including permanent partial disability.

Scheduled Permanent Partial Benefits. Scheduled benefits under both statutes are essentially the same. Both include a basic schedule listing the extremities and sensory organs. For the most part the number of weeks of benefits is the same under the two laws. The weekly benefit is 66 2/3 percent of the worker's preinjury wage under both laws.

The new D.C. Act does tighten the hearing loss provisions. Employees must wait for a period of at least six months after they leave the work environment before loss of hearing can be tested if the claim results from nontraumatic causes in that environment. The employee is not prevented from filing for temporary partial benefits during that waiting period, however.

In the disfigurement section, both the D.C. and Longshoremen's Acts limit claims to $3,500 "for serious disfigurement of the face, neck or other normally exposed bodily areas," but the Longshoremen's Act and not the D.C. Act adds the modifying phrase "likely to handicap the employee in securing or maintaining employment."

Nonscheduled Benefits. The Longshoremen's Act tracks the language of New York State's statute almost exactly in nonscheduled benefits denominated as "other cases" (Sec. 8[c][21] of the Longshoremen's Act and Sec. 15[w] in the N.Y. Act):

> In all other cases in this class of disability, the compensation shall be sixty six and two-thirds per centum of the difference between his average weekly wages and his wage-earning capacity, thereafter in the same employment or otherwise, payable during the continuance of such partial disability, but subject to reconsideration of the degree of such impairment by the [board] [deputy commissioner] or [its] [his] motion or upon application of any party in interest.

As the law was interpreted in the District under the Longshoremen's Act, the test administered in nonscheduled permanent partial cases was that of impairment of wage-earning capacity. In theory, the extent of impairment of wage-earning capacity depended first on the physician's evaluation of the impairment, and second on the worker's wage after the injury as compared to his wage before. At the time of our field work, however, we observed that the physicians were the primary evaluators of impairment and that in many cases their ratings appeared to be the only information considered in closing the case. The physicians operated without any evaluation guidance from the deputy commissioner either through published works or through any other means. Although the practice at the informal level did not require evidence of actual wage loss, the decisions at the appeal levels held that reemployment of a worker at prior wages would preclude an award on the nonscheduled basis (*Kendal v. Bethlehem* [12 BRBS 150]) unless there was some reason to believe that the wages actually received were not what he could earn in the open labor market (*Silverstein v. Service Printing Company, Inc.* [2 BRBS 143]).

The new District Act charges the statutory provision for nonscheduled cases, presumably eliminating any doubts about its meaning. It does not use the term "earning capacity" but speaks instead of "wage loss." D.C. Code 36-508 Section 9 (a)(22), still denominated as the "other cases," provides:

> In this class of disability the compensation shall be sixty-six and two-thirds (66 2/3) percent of the employee's *wage loss*, payable during the continuance of such disability. Wage loss shall be the difference between the employee's average weekly wage before becoming disabled and the employee's actual wage after becoming disabled. If the employee voluntarily limits his income or fails to accept employment commensurate with his abilities, then his wages after becoming disabled shall be deemed to be the amount he would earn if he did not voluntarily limit his income or did accept employment commensurate with his abilities. [emphasis added]

Certainly, the intent of the statute is to provide an actual wage-loss test, which inevitably must test whether the postinjury wages are those a normally motivated worker might reasonably earn in the open competitive labor market. If this intent is carried out in practice, the District of Columbia will have to be reclassified as a category III jurisdiction.

Given the extensive schedule, it is likely that most permanent partial cases will be decided on the scheduled basis. At the time of our field study we could not locate any comprehensive statistics, but found a study made by Popkin (1975) of a sample of 811 cases handled by Administrative Law Judges over a three-month period. Of these, 491 involved a permanent disability issue. Four hundred and thirty-two of these, or 88 percent, were scheduled cases, and 45, or 9 percent, were nonscheduled cases. The remaining 3 percent could not be classified. Popkin concluded that most of the cases were decided on the scheduled basis if it was at all possible because resolution of these cases did not require proof of loss of wage-earning capacity. Since the new D.C. Act contemplates a sterner test of wage loss for nonscheduled cases, it is likely that the majority of cases will still be decided on the scheduled basis. Under the old law, as will probably be the practice under the new, the cases decided on the nonscheduled basis tended to be more serious and hence more costly. Benefits under the nonscheduled category can continue for life or for as long as the decrease in wage-earning capacity or wage loss remains.

Temporary Partial Benefits. Temporary partial disability benefits are paid when an injured worker returns to work before his medical condition has fully stabilized, and his wages are lower than prior to the injury. The Longshoremen's Act uses the same language relating to wage-earning capacity in its provision for temporary partial benefits as it does in its provision for the nonscheduled cases. The new D.C. Act also has a temporary partial benefit provision, which makes the same change as for nonscheduled injuries and thus speaks of wage loss and not loss of wage-earning capacity. Under both laws, the benefits are limited to a period of five years.

Lump-Sum Payments. Our finding at the time of the field work investigations was that lump-sum payments were not encouraged in the District under the Longshoremen's Act. Official settlements acted as a release under the Longshoremen's Act Sec. 8 (i)(A) if approved by the deputy commissioner. Apparently informal settlements were reached that did not come before the deputy commissioner, since the workers merely withdrew their claims.

A provision of the new D.C. Code (36-508 Sec. 9[h]) makes it clear that "such settlements are to be complete and final dispositions of a case and once approved require no further action by the mayor."

Permanent Total Disability. The Longshoremen's Act provided a presumption of permanent and total disability in the event of the loss of two major members. Also, "In all other cases permanent total disability shall be determined in accordance with the facts" (Sec. 8 [a]).

The new D.C. Act, in keeping with its attempt to foster a wage-loss orientation, provides for the same presumptions in regard to the loss of major members, but then goes on to state: "In all other cases permanent total disability shall be determined only if, as a result of the injury, the employee is unable to earn any wages in the same or other employment" (Sec. 9 [a]).

Administration. Under the old act, the District of Columbia was one of the geographical districts under the U.S. Department of Labor's unit that administered the Longshoremen's Act; a deputy commissioner and his or her assistant supervised the processing of claims. Claims examiners monitored claims and conducted some of the informal conferences. Contested claims were heard by the deputy commissioner and decisions could be appealed to an administrative law judge. Further appeals were to the Benefits Review Board established under the Longshoremen's Act and from there to the Circuit Court of Appeals.

The new act is to be administered by the mayor, who is empowered to make the necessary rules and regulations. The statute contemplates a direct payment system (Sec. 16 [a]) with the first installment due 14 days after the employer has received notice of injury. Penalties are provided in the event payment is not made promptly. The administrator is empowered in all cases, controverted and noncontroverted, to investigate, cause medical examinations to be made, hold hearings, and take any further action to properly protect the rights of all parties (Sec. 16[h]).

A system of hearings within the agency is provided for (Secs. 21 and 26), as is a system for review (Sec. 23). Any party adversely affected by a final decision may petition for a review of the decision by the District of Columbia Court of Appeals.

Initial Impact of the New Law

The new law did not become effective until July 26, 1982, and so little data are available to assess its impact. The 1982 data on the numbers and costs of permanent disability cases contained in chapter 3 cover a policy period that ran from February 1982 to January 1983, and so include about half a year of experience under the new law. The 1982

data show a drop from 1978 in the share of all costs accounted for by major permanent partial cases (from 193 percent to 154 percent of the national average share; table 3.15) and in the share of all costs accounted for by all permanent disability cases (from 121 to 113 percent of the national average share; table 3.16). The drop in the latter statistic moved the District from first to third place among the eight jurisdictions with comparable data that we are examining.

Even more dramatic evidence of the apparent impact of the new law is reflected in the data on the employers' costs of workers' compensation insurance shown in table 3.18. In 1978, District employers were expending 3.502 percent of payroll on insurance, a figure that was 247 percent of the national average. By 1984, these employers were spending 1.909 percent of payroll on insurance, only about 40 percent above the national average.

To the extent the purpose of the new workers' compensation law in the District of Columbia was to lower the employers' costs of the program, it must be judged a resounding success. The primary cause probably was the lowering of the maximum weekly benefits compared to the levels in the Longshoremen's Act; but the shift to new criteria for nonscheduled permanent partial disability benefits may also be a significant factor, since this would help explain the decline between 1978 and 1982 in the proportions of all cases accounted for by permanent partial disability cases (tables 3.7 and 3.8).

Wisconsin

The Wisconsin workers' compensation law was enacted in 1911 and was "the first law to become and remain effective."[21] The Wisconsin program is not only the oldest, but it is generally regarded as one of the best, particularly in terms of quality of administration. Nonetheless, Wisconsin criteria and procedures for permanent disability benefits are not without problems, as evidenced by the recent establishment of a Study Commission to examine *inter alia* permanent partial disability.

Criteria for Permanent Disability Benefits

The original Wisconsin law of 1911 based compensation on the loss of wages, but by the next year the Industrial Commission called for a restructuring:[22]

> Compensation under the Wisconsin law is based on loss of wage. Theoretically this is the correct principle, but in order

> to secure a simpler administration, it may be well to adopt the New Jersey plan for certain definable injuries. For instance, the New Jersey law provides as compensation for the loss of a great toe, 50 percent of the daily wage during thirty weeks; for the loss of an eye, 50 percent of the daily wage during 100 weeks, and so on through a complete list of definite injuries. This provision makes it easy for the employee and employer definitely to ascertain the compensation without reference to the administering board. We suggest that both employers and employees consider this matter with the view of possible amendment to our law.

The Wisconsin law was amended in 1913 to provide the approach found in most states: first, a statutory schedule of injuries constituting permanent partial disability; second, a provision for nonscheduled permanent partial injuries; and third, a provision for permanent total disability. Although the statute has been amended since 1913, the three-way division of permanent disabilities is still found in the current act.

The schedule (Secs. 102.52 to 102.56), with some 43 entries, is more detailed than most. The list is lengthy because there are multiple entries for each of the fingers and toes, indicating the exact number of weeks of compensation to be paid for a loss at the specified joints.

For the "loss of use cases," the statute (Sec. 102.55[3]) provides:

> For all other injuries to the members of the body or its faculties which are specified in this schedule resulting in permanent disability, though the member be not actually severed or the faculty totally lost, compensation shall bear such relation to that named in this schedule as disabilities bear to the disabilities named in this schedule.

For injuries that cannot be scheduled, the statute (Sec. 102.44[3]) provides that "the aggregate number of weeks of indemnity shall bear such relationship to 1000 weeks as the nature of the injury bears to one causing permanent total disability." And for permanent total disability, the statute provides:

> Total impairment for industrial use of both eyes, or the loss of both arms at or near the shoulder or of both legs at or near the hip, or of one arm at the shoulder and one leg at the hip, constitutes permanent total disability. This enumeration is not exclusive, but in other cases the department shall find the facts. (Sec. 102.44[2])

The potential durations and weekly benefit amounts vary considerably among the three types of permanent disability benefits. As of 1986, permanent total disability benefits were 66 2/3 percent of the worker's preinjury wage, subject to a maximum weekly benefit of $329; the benefits were payable for life. Scheduled permanent partial disability benefits were 66 2/3 percent of the state's average weekly wage, subject to a maximum weekly benefit of $112, which was the fifth lowest in the country. Thus, even though the scheduled duration of 500 weeks for loss of an arm was the longest in the country, the maximum amount of benefits for loss of an arm in Wisconsin ($56,000) was less than in six other jurisdictions in our 10-state study (table 5.3). The same disparity between low weekly amount and long potential duration of benefits is also found for Wisconsin nonscheduled permanent partial disability benefits: the weekly benefit of 66 2/3 percent of preinjury wages was subject to a maximum of $112, while the potential duration of 1000 weeks was exceeded only by nine jurisdictions in the U.S.[23]

Basis for Nonscheduled Permanent Partial Awards. The statutory language for nonscheduled permanent partial disability (quoted above) is subject to various interpretations. Until the 1970s, the Workers' Compensation Division primarily relied on evaluations of impairment—the medical consequences of the work injury—to determine the number of weeks of benefits, even though decisions of the Wisconsin Supreme Court since 1947 had at least implicitly endorsed the notion that ratings for nonscheduled permanent partial disability should be based on loss of earning capacity.[24]

The movement towards the loss of earning capacity approach received substantial impetus from the court's 1968 holding in *Kurschner v. ILHR Department*, 40 Wis. 2d 10. The court held that a nonscheduled injury should be evaluated in comparison with permanent total disability for industrial purposes. It based its reasoning on the statutory provision for permanent total disability that speaks of "total impairment for industrial use," and the provision for nonscheduled injuries under which the number of weeks of benefits paid bears the same relationship to

1,000 weeks "as the nature of the injury bears to one causing permanent total disability." Thus, nonscheduled permanent partial injuries, the court concluded (at 18), "are to be compared medically with injuries that would render a person permanently totally disabled for industrial purposes . . . and *not* to injuries that would totally disable a person functionally without regard to loss of earning capacity."

Despite this 1968 decision supporting the evaluation of loss of earning capacity as the basis for nonscheduled permanent partial disability awards, the operational basis for benefits remained the evaluation of the extent of impairment or functional limitations. Only the terminology was changed to bring practice into superficial conformity with the court's edict. According to Neal, (1983 at p. 45),

> Attorneys (and examiners) became careful to have the physician express his percentage estimate (which almost always remained a functional estimate) in acceptable terms, such as "permanent disability for industrial purposes," "as compared to permanent, total disability" and the like. Most physicians went along with the game . . . . The use of the "magic words" by physicians was routinely held sufficient by the Supreme and Circuit Courts.

The *de facto* reliance on impairment as the basis for nonscheduled permanent partial ratings despite the *de jure* adherence to disability (loss of earning capacity) is the situation that existed when we conducted our field work in 1975-76, and explains why we classified Wisconsin as a category I (impairment) state in the *NSF Report* (Berkowitz, Burton, and Vroman 1979). Subsequent court decisions and changes in agency practices have now clearly moved Wisconsin into category II, among jurisdictions that base nonscheduled benefits on loss of earning capacity.

A significant case in this transformation of Wisconsin was *Balczewski v. ILHR Department*, 76 Wis. 2d 487 (1977). The claimant was found to be 55 percent permanently disabled as a result of the work injury, with the rating based on the physician's estimate of the extent of impairment (apparently phrased in the "correct" terms enumerated above by Neal). A guidance counselor who was an expert in industrial employment testified that the claimant was not qualified for any industrial employment by reason of her condition, age, and lack of education. The court invoked the "odd lot doctrine," which is a rule of evidence that when a claimant has been injured in an industrial accident and cannot, because of her "injury, age, education and capacity," secure a

job, there is a *prima facie* case showing of permanent total disability, and the burden of showing that jobs do exist for the claimant shifts to the employer. The court concluded that the odd-lot doctrine was part of Wisconsin law, but since it had not been recognized as part of the law by the examiner, or the department on review, the case was remanded for further consideration.

The *Balczewski* decision was interpreted by many, according to Neal (1983, p. 45), "as a signal that physicians were no longer competent to estimate loss of wage earning capacity, whatever language was used to express the estimate." In short, the Supreme Court was insisting that the practice converge to the legal norms it had established.

Any doubts that the Supreme Court meant that loss of earning capacity was the basis for all nonscheduled awards (and not just in the conversion of a serious nonscheduled rating into a permanent total award, as in *Balczewski*) were removed with the decision in *Pfister & Vogel Tanning Co. v. DILHR*, 86 Wis. 2d 522 (1979). Two physicians had rated the claimant at 5 percent disabled; another physician had reported the permanent partial disability at about 15 percent; and the hearing examiner found that the claimant had a 20 percent permanent disability. However, the lower court that initially reviewed the agency's decision found that none of these ratings had considered the economic loss of earning capacity resulting from the injury. The Supreme Court was adamant in rejecting this agency approach in *Pfister*. The court (at p. 529) distinguished functional or medical impairment from impairment with regard to earning capacity, and concluded that it was the latter impairment that should be measured in assessing nonscheduled injury:

> In *Kurschner* we held that the Industrial Commission erred in adopting the finding of the examiner who determined permanent partial disability by comparing the employee's injuries to those of a hypothetical person totally disabled functionally and not to one totally disabled as to loss of earning capacity. Workers' compensation disability is not the same as functional disability. In a number of cases we have said that a finding of permanent partial disability by the Industrial Commission must be based on a consideration of both factors—loss of bodily function and loss of earning capacity. Consideration of both factors is necessary to implement the objective of the Workers' Compensation Act, namely to "compensate in some measure injured workmen for *loss of wage-earning power* sustained in the industry."

Three consequences of the court's clear mandate to use loss of earning capacity rather than impairment ("loss of bodily function") warrant attention. First, the law was amended in 1980 to require nonscheduled injuries to be rated solely on the basis of physical limitations without regard to loss of earning capacity when the worker returns to work for the same employer as at the time of injury at a wage loss of less than 15 percent (Sec. 102.44). A good faith offer of employment refused by the worker without reasonable cause has the same effect as actual reemployment. A case closed under this provision can be reopened if within 12 years there is a termination of employment or wage loss of 15 percent or more. The result of this amendment is to give Wisconsin a distinctive set of rules for determining the ratings for nonscheduled injuries with permanent consequences: (1) a minimum rating is based on the extent of impairment; (2) the minimum rating cannot be increased or decreased if the worker has actual wage loss of less than 15 percent of preinjury wages; and (3) if actual wage loss exceeds 15 percent, the minimum rating can be increased (but not decreased) based on the extent of loss of earning capacity.

The second consequence of the court's decision was a capitulation by the workers' compensation agency (DILHR) to the view that nonscheduled permanent partial disability cases (other than those just discussed involving minimal actual wage loss) should be rated on the basis of loss of earning capacity. By a rule (Ind. 80.34) effective October 1982 all departmental determinations as to loss of earning capacity for nonscheduled permanent partial disability and permanent total disability are to:

> take into account the effect of the injured employee's permanent physical and mental limitations resulting from the injury upon present and potential earnings in view of the following factors: (a) Age; (b) Education; (c) Training; (d) Previous work experience; (e) Previous earnings; (f) Present occupation and earnings; (g) Likelihood of future suitable occupational change; (h) Efforts to obtain suitable employment; (i) Willingness to make reasonable change in a residence to secure suitable employment; (j) Success of and willingness to participate in reasonable physical and vocational rehabilitation program; and (k) Other pertinent evidence.

A third notable consequence of the shift from impairment to loss of earning capacity as a basis for nonscheduled permanent partial disability

is a change in the professions relied upon for ratings. In the period before the *Kurschner* decision in 1968, physicians were dominant because ratings were based on impairment. The initial impact of the *Kurschner* decision, as previously discussed, was to change the language of the reports (so terms such as "permanent disability for industrial purposes" were used), but to continue to rely on physicians for the reports. But the court's continuing insistence on loss of earning capacity as the basis for ratings eventually forced a change, as discussed by Neal (1983, pp. 45-46):

> *Balczewski's* rejection of the physician's estimate (apparently phrased in the "correct" terms) . . . was perceived by many as a signal that physicians were no longer competent to estimate loss of wage earning capacity, whatever language was used to express the estimate. And applicant's attorneys soon learned that the vocational expert's opinion was much more favorable to the client than the physician's.
>
> The trend toward the use of vocational experts has since grown steadily. . . .
>
> What is the law and practice today? Most applicants' attorneys use vocational experts because the estimates are higher. Some also voice fear of malpractice suit if they do not. The Labor and Industry Review Commission, in reaction to *Pfister*, has been remanding some awards where a permanent disability finding is based on medical testimony only.

Administration of the Wisconsin Program

Processing workers' compensation cases is a responsibility of the Workers' Compensation Division of the Department of Industry, Labor and Human Relations (DILHR). The administrator of the division oversees the hearing examiners and, in general, actively administers the act. Reviews of examiners' decisions are made by a commission within the department.

The division is active in communicating with the parties and seeing to it that procedures are followed and payments made in a timely fashion. As discussed in chapter 4, Wisconsin provides evaluation guidance to the parties so they know the amounts to be paid in permanent partial disability cases.

The active administrative stance of the administrator of the workers' compensation system extends to legislative concerns. Workers' compensation legislation, by tradition and by statute (Sec. 102.14), originates with an advisory council on workers' compensation, consisting of five representatives from labor and five from industry, chaired by the administrator of the Workers' Compensation Division. Three representatives of the insurance industry attend meetings of the council, but do not have a vote. Once the legislative issues are thrashed out by the advisory council, the division takes the responsibility for putting the council's recommendations into final form. The tradition has been to submit an agreed-upon bill to the legislature with the understanding that the members of the advisory council will support the agreed-upon bill and oppose all others.

Processing Permanent Partial Disability Cases

The active role of the administration in communicating with the parties and in providing guidance in the evaluation of permanent partial disabilities is illustrated by the procedures involved in the processing of cases.

Wisconsin is the epitome of the direct payment state. The employer is required to file a first report of injury or disease (Form WC-12) and, 11 days after the accident or the beginning of disability, a supplemental report (WC-13). The latter form indicates the amount of compensation paid or the reason compensation was not paid. The same form is used to let the division know of a final payment, and may be used in case of a suspension of payments.

Insurance carriers and self-insured employers are expected to pay claims promptly. The division's standard is that 80 percent of cases be mailed or delivered within 14 days after injuries are reported. The Workers' Compensation Division has monitored first payment performance since 1921, either by correspondence or by personal visits. The division releases periodic reports detailing the promptness records of individual carriers. In 1985, local government self-insurers, on the average, met the standard, but 22.3 percent of payments from nongovernmental self-insurers and 26.9 percent of payments from insurance carriers were not made within the 14-day period (Gmeinder and Tatarsky 1986, p. 30). Insurers and self-insurers who do not meet the standard are asked to explain why.

The division requires a physician's report if the disability lasts more than three weeks or if there is any permanent disability. The physician is asked to estimate the amount of permanent disability resulting from the injury. Such estimates are influenced by the guidelines established by rule of the division. If there is some controversy about the extent of disability, the carrier is expected to pay the minimal amount conceded without any order from the division. Failure to do so may subject the carrier to a 10 percent penalty. There are, of course, cases in which employers or carriers dispute liability completely; when they do so, they are expected to notify the division.

In some states, such notification, or any dissatisfaction by the division with some action of the carrier, results in the case being scheduled before a hearing officer. In Wisconsin, much is accomplished by correspondence between the division and the parties. For example, if compensation payments are not being made, the agency may send a form letter to the carrier with the following message: "More than 30 days have elapsed since compensation payment was due in this case. You have had more than enough time to complete a necessary investigation, unless unusual circumstances prevail" (Guide Letter #6). If the injured worker complains about not receiving compensation, the agency sends a letter to the worker informing him that the agency has notified the employer's insurance carrier of the complaint and has requested an explanation.

If the carrier does not respond, one of the administrative staff will attempt to find out whether the cause of delay is a genuine dispute or perhaps confused communications. If the problem, for example, is that the doctor has not filed the necessary medical reports, the worker may be asked to contact the doctor to urge him to send in the necessary report. The division has made arrangements to invoke the aid of the Wisconsin Medical Society in securing these reports. In short, the division does not hesitate to intervene actively by correspondence or by phone call to one party or the other.

Of course, cases of serious dispute concerning liability or extent of disability result in applications for hearings, but even at this stage the employer is advised to pay the compensation that is admittedly due and accrued.

The case may go directly to a hearing, or may be set down for a pretrial conference to establish the issues in dispute, although before that stage

is reached the administrative personnel of the agency will make sure that the file is complete and that the physician's forms are in. The administrator may give a good deal of assistance to the claimant in filling out forms, because it is not automatically assumed that the claimant needs an attorney.

At the pretrial conference, the examiner attempts to get the parties to agree about the issues, or, if that is not possible, to determine whether a formal hearing is necessary. Some compromises are reached at this stage, although these do not necessarily involve a release of the employer's obligation for further medical care or even for future cash benefits should the employee's condition worsen. The parties are urged to stipulate to as many mutually accepted facts as possible at the pretrial conference.

A 1980 amendment (Sec. 102.18 [1][c]) provided for a tie-breaking procedure for cases in which two or more examiners have conducted hearings and are unable to agree within a range of 5 percent of the highest or lowest estimate of permanent partial disability. An additional examiner may be appointed for findings of fact, and an order of award may then be issued by a majority of the examiners. Also, these same amendments provided that any award that falls within a range of 5 percent of the highest or lowest estimate of permanent partial disability is presumed to be a reasonable award "provided it is not higher than the highest or lower than the lowest estimate in evidence" (Sec. 102.18 [1][d]).

Evaluation Rules

Wisconsin has issued a series of rules to guide physicians who rate the permanent consequences of injuries. Rule 80.32 covers "percentages of loss of use or losses of motion as compared with amputations at the involved joints." It also includes injuries to the back. As the rule states in paragraph 1:

> The disabilities set forth in this section are the minimums for the described conditions. However, findings of additional disabling elements shall result in an estimate higher than the minimum. The minimum also assumes that the member, the back, etc., was previously without disability. Appropriate reduction shall be made for any preexisting disability.
>
> Note: An example would be where in addition to a described loss of motion, pain and circulatory disturbance further

> limits the use of an arm or a leg. The removal of a semilunar cartilage in a knee with less than a good result would call for an estimate higher than 5% loss of use of the leg at the knee. The same principle would apply to laminectomies or spinal fusions. The schedule of minimum disabilities contained in this section was adopted upon the advice of the orthopedic advisory committee.

Thus the general guides provide for minimum ratings that may be supplemented if there is a finding of additional disabling factors. Further, the physician has the discretion to determine whether pain or a circulatory disturbance contributes to the restriction for practical purposes of the use of an extremity.

The guides provide fairly detailed instruction for rating amputation of the upper and lower extremities and sensory loss to the digits, hands, portions of the arms, and so on. Some (though less) guidance is provided for rating back injuries and loss of hearing and vision.

The deputy administrator has prepared a guide for physicians and carriers showing comparisons between evaluations of disability as expected under Wisconsin's Workmen's Compensation Act and those listed in the AMA *Guides to the Evaluation of Permanent Impairment*. Some of the conditions listed are impairments by AMA standards, but would not be compensable under Wisconsin's workers' compensation standards.

Not only are Wisconsin's statutory provisions relating to permanent partial disabilities quite detailed, but the division has issued rules and regulations supplementing the statute that provide further guidance to the parties in making their evaluations. In addition, the administrators provide guidance on an informal basis, so that the physician has some way to translate his findings into percentage ratings acceptable to the administrators. Finally, the administrator actively communicates the division's policies to the parties and is perfectly willing to instruct physicians as to whether they are meeting the guidelines.

Cases and Work Load

Wisconsin has been widely esteemed as a state that has succeeded in keeping litigation within reasonable bounds. This remains largely true, although litigation has increased, in part because the number of cases has increased. In 1970, the state received 39,841 first reports of accidents that were likely indemnity cases. By 1979, the number of cases had increased to 82,352—more than doubling the number of reported

cases in less than a decade. Then the case load dropped—to 54,579 cases reported in 1983—and then partially rebounded—to 65,679 in 1985 (Gmeinder and Tatarsky 1986, p. 3).

Application for hearing is one measure of litigation. From 1970 to 1979, the number of applications almost doubled (from 2,069 to 3,822), roughly matching the increase in first reports of injuries, so that the "litigation rate" (number of applications per 100 first reports) hovered around 5 in the 1970s. Then as the number of reported cases dropped in the 1980s, the applications for hearing did not. In 1984 there were 4,989 applications for hearing out of 61,588 reported cases, for a 8.1 percent litigation rate. In 1985, applications exceeded 5000 for the first time (at 5,133), but the number of reported cases increased to 65,679 and so the litigation rate dropped to 7.8 percent (Gmeinder and Tatarsky 1986, p. 31)—still high by Wisconsin's historical standards.

Other measures of litigation are the numbers of informal hearings (pretrial conferences) and of formal hearings, and these also show increasing litigiousness in Wisconsin. To be sure, formal hearings have not expanded—from 1,478 in 1970 to 1,093 in 1980 to 1,463 in 1985. But pretrial conferences have spurted—from 1,360 to 3,019 to 4,255 in these same years (Gmeinder and Tatarsky 1986, p. 33).

One "solution" to disputed cases in most states is a compromise and release agreement, in which the worker typically receives a lump-sum settlement in exchange for a release of the employer's further liability. Compromise agreements in Wisconsin are discouraged. Every compromise may be reviewed and set aside or modified within one year after the filing of the agreement. Also the act clearly specifies that a stipulation of settlement is not a compromise agreement and it does not bar future claims. The claimant, for example, may be entitled to future medical benefits. As a result, compromise agreements are uncommon in Wisconsin, with the 1,614 in 1985 accounting for only 3 percent of the 52,088 cases initially closed that year.

Lessons from Wisconsin

The experience in Wisconsin illustrates the difficulties of meeting all three criteria presented in chapter 2: adequacy, equity, and efficiency. The tension between equity and efficiency is particularly evident.

Wisconsin's record on efficiency is outstanding using several measures of performance. The employers' costs of workers' compensation insurance in Wisconsin have been consistently below the national average

since 1958, with a representative sample of employers paying only 62 percent of the national average in 1984 (table 3.18). Moreover, the record has not been achieved by paying parsimonious benefits. Rather, among the seven Great Lakes states with comparable data (all but Ohio), Wisconsin in 1984 had the highest ratio of benefits received by workers to insurance premiums paid by employers (Burton and Partridge 1985, p. 62).

The Wisconsin workers' compensation agency also appears to be a model of efficiency. The data in table 4.1 indicate that the size of the budget and workforce in Wisconsin are relatively low compared to the other jurisdictions we are intensively examining. If anything, the comparisons are "stacked" against Wisconsin since its agency performs the full set of administrative functions described in chapter 4, including monitoring and evaluation, while some of the other states' agencies are essentially passive, doing little more than adjudicating disputed claims.

The reasons for the efficiency in Wisconsin, as reflected in the employers' costs of insurance and the agency operations, include several factors previously discussed. The share of all cash benefits accounted for by permanent disability cases is generally related to the employers' costs of workers' compensation insurance (graph 3.2), and Wisconsin has consistently kept its permanent disability benefits share at or below the national average (table 3.17). The agency efficiency results in part from its aggressive stance in promoting voluntary settlements and avoiding litigation. Among 13 states with data available from the National Council on Compensation Insurance, Wisconsin and Pennsylvania had the lowest percentage (2 percent) of cases where claimants were represented by attorneys; the average for all 13 states was 8 percent (NCCI *Claims Characteristics*, 1984, p. 3). The quality performance of the Wisconsin agency also appears to reflect the general reputation of Wisconsin as a "good government" state, in which government employment is a career rather than a way-stop. The long-standing support of the Wisconsin program by the Advisory Council is also a factor that helps explain the quality of the agency.

The record of the Wisconsin workers' compensation program is not unsullied, however. There is cause for concern about the adequacy of the permanent partial disability benefits because of the low weekly maximum. As documented in chapter 10, Wisconsin workers who were injured in 1968 and received permanent partial disability awards did receive adequate benefits. However, between 1968 and 1986 the maximum for permanent partial disability benefits increased 136 percent (from $47.50

to $112), less than the 182 percent increase in average wages in the state over the latest comparable period.[25] Wisconsin benefits for permanently disabled workers may, therefore, no longer be adequate.

Even if Wisconsin is at least arguably satisfying the adequacy criterion for permanent disability benefits, there is strong evidence that the benefits are inequitable. The essence of equity is that workers with equal losses of income due to work injuries receive equal benefits (horizonal equity), while workers with different amounts of income losses receive benefits proportional to their losses (vertical equity). The data in chapter 10 for Wisconsin workers injured in 1968 show numerous violations of horizonal and vertical equity. Similar results were found by Ginnold (1979), who also studied workers injured in 1968. He found, for example (p. 85), that workers with scheduled permanent partial ratings averaging 13 percent were on average experiencing no earnings losses in 1973, but by then the workers with nonscheduled ratings averaging 11 percent were experiencing 25 percent earnings losses.

A concern for equity in the Wisconsin workers' compensation program is reflected in the Wisconsin Supreme Court's decisions about the basis for nonscheduled permanent partial disability benefits. The court in effect recognized that if the purpose of workers' compensation benefits is primarily to compensate workers for work disability—an economic consequence of the injury—then an operational approach that only examines the workers' impairments (''functional disabilities'') is unlikely to produce benefits that serve the primary purpose well. Following that reasoning, the court (in conjunction with the legislature) in a quest for equity ruled that nonscheduled benefits should be based not only on impairment but on a combination of impairment, loss of earning capacity, and even a strain of actual wage loss.

The transformation of the basis for nonscheduled benefits can be considered a trade-off of efficiency for equity. For whatever are the defects of ratings based on impairment, they are relatively objective and thus less prone to disagreement and litigation than ratings based on loss of earning capacity. Surely even reasonable men and women would disagree about the application of the factors enumerated in agency rule Ind. 80.34 (quoted earlier) that are used in determining the loss of earning capacity.

The tension between equity and efficiency reflected in the transformed basis for nonscheduled benefits is a tension present in the determination of all permanent disability benefits in Wisconsin (and indeed in

all states). How can equity be promoted without reducing efficiency? The problem must be carefully stated, because as we have argued in chapter 2, it is easy to achieve a myopic version of efficiency in which the only concern is for low costs of the delivery system (and in particular low costs of the state workers' compensation agency) without regard to the quality of the program, as measured by the equity and adequacy of benefits. A more appropriate version of equity—which we have termed panoramic efficiency—is concerned simultaneously with the costs of the delivery system and the quality of the program.

The proper view of efficiency will not consider a larger budget for a state agency or even more litigation as necessarily inefficient if these are necessary to achieve greater adequacy or equity of benefits. We hasten to add, however, that the evidence from other states that will be reviewed in chapter 11 provides no support for the notion that greater litigation necessarily promotes equity or adequacy. And we particularly doubt that greater litigation resulting from the use of loss of earning capacity as a basis for permanent disability benefits is likely to promote adequacy or equity. We are therefore concerned that the recent change in the basis for nonscheduled permanent partial disability benefits in Wisconsin has been accompanied by increased litigation. We realize that other factors—including, perhaps, a trend towards greater tolerance of litigation—may partly explain the increased litigation in Wisconsin. We view the recent change of job title in the Wisconsin workers' compensation program from "hearing examiner" to "administrative law judge" as a disturbing evidence of such a trend. But regardless of the influence of these other factors, we believe that use of loss of earning capacity as a basis for nonscheduled benefits will almost inevitably increase litigation, and we are skeptical of the view that improvements in equity will result.

One of the challenges for the new Wisconsin Study Commission is to figure out a better way to improve equity than by changing the basis for permanent disability benefits to loss of earning capacity. One problem with the recent developments in Wisconsin is that ratings for scheduled permanent partial disability benefits are still based strictly on an assessment of impairment. Thus, even if a case can be made that the transformation of the basis for nonscheduled benefits has been beneficial, the majority of workers in Wisconsin with permanent disabilities must still rely on scheduled benefits that are demonstrably inequitable.

NOTES

1. During the second quarter of 1986, 39 percent of all new original filings of applications for adjudication contained the insurer's first notice of the injury, down from the 1977 record of 53 percent (California Workers' Compensation Institute *Bulletin* [hereafter CWCI *Bulletin*], No. 85-8, Oct. 2, 1985 and CWCI *Bulletin* No. 86-7, Aug. 14, 1986).

2. In 90-95 percent of cases involving an application for adjudication, the worker is represented by an attorney (U.S. Dept. of Labor, *Administration Profiles*, 1985, p. 29).

3. The data on the activity in the Courts of Appeal and Supreme Court are from 14 *California Workers' Compensation Reporter* (hereafter *CWCR*) 63, April 1986.

4. An employer, his carrier, or the Board can also initiate movement in a case by filing a Declaration of Readiness to Proceed.

5. In some cases involving a request for approval of a compromise and release, the case has already had an informal or formal disability rating prepared by the Disability Evaluation Bureau, and that could be considered by the judge in determining the appropriateness of the proposed compromise and release settlement.

6. The order of the judge approving a compromise and release agreement is subject to a petition for reconsideration or a writ of review, and the Workers' Compensation Appeals Board may on its own motion reconsider a compromise and release agreement approved by a judge (Swezey 1985, sec. 13.52). The latter procedure is rarely used.

7. More extensive discussions can be found in the chapter "Permanent Disability Evaluation" (Welch 1973), and in the June 4, 1964, "Presentation on Permanent Disability Ratings" to the Workmen's Compensation Study Commission ("Moss Commission"), both by Eli P. Welch, chief of the Permanent Disability Rating Bureau; and in the California Senate Interim Committee's *Report on Workmen's Compensation Benefits* (Part I, 1953). These items were relied on for much of the material in this chapter. Welch's "Permanent Disability Evaluation" chapter is similar to chapter 16 in Swezey (1985).

8. The only other change in the language was made in 1966, when authority to prepare, adopt, and amend the schedule was transferred from the Industrial Accident Commission (the predecessor of the Workers' Compensation Appeals Board) to the administrative director of the Division of Industrial Accidents.

9. There were 14 amendments by 1939, according to Welch (1964, p. 16).

10. The example is from Swezey (1985, sec. 16.29).

11. "Actually, 'slight,' 'moderate,' and 'severe' have different meanings to different persons involved in the judicial process of the commission. What may be 'slight,' 'moderate,' or 'severe' as the case may be, to litigants and referees alike, may prove to be something different to the rating specialist although presumably the latter also functions under the same legislative formula and rules of evidence" (Senate Interim Committee 1953, p. 42).

12. A May 20, 1986 letter from Barry F. Carmody, acting administrative director of the Division of Industrial Accidents, to All Interested Parties indicated that the Division is renewing the *Schedule for Rating Permanent Disabilities* in order to provide "more equitable permanent disability determinations." A request was made for a list of occupations not currently in the schedule that should be included.

13. Nor do we.

14. To be sure, the workers' compensation judge can use an independent medical examiner or an agreed medical examiner to assess the extent of injury, but ultimately the judge must decide whether to accept the medical opinion from these sources, and that decision is an act of discretion.

15. These injuries or diseases are described in California as nonscheduled (see quotation below). This use of the term "nonscheduled," however, differs from the term's use in most states, where all cases that cannot be rated by reference to the list of injuries in the statute are considered nonscheduled and are evaluated on the basis of a general standard. In California, the procedure in "nonscheduled" cases is roughly comparable to the process used in most states to evaluate loss of use cases for scheduled injuries. As described by Welch (1973, sec. 15.22), in California "a disability rating (sometimes referred to as a judgment rating) is one for which the disability is not precisely described in the schedule, or the occupation is not specifically listed. Most ratings are nonscheduled. The schedule can be applied to nonscheduled disabilities in three ways: (1) by comparison with the most similar scheduled disability, or (2) by analogy to a scheduled disability, or (3) by comparison with the entire scheme of relative severity of disability."

16. The California schedule for mental deterioration, for example, consists of four levels—slight, moderate, severe, and pronounced—with no description of what these levels involve. The AMA *Guides* devote a chapter to mental illness.

17. CWCI *Bulletin* No. 85-6, July 10, 1985. The CWCI estimate of $600 million plus has been challenged by the California Applicants' Attorneys Association (CAAA) in "Litigation Costs in California's Workers' Compensation System," a three-page, undated memorandum. The CAAA estimates the costs as only $243 million. This figure, however, excludes $110 million of applicants' attorneys fees and $27 million for the costs of the WCAB because these "costs are not paid by employers as a part of their workers' compensation costs." As we have defined costs of the delivery system in chapter 2, however, these costs should be included, and doing so would make the total costs of litigation some $380 million annually in California. Obviously the difference between the CWCI estimate of $600 million and the $380 million figure is substantial, but even the lower figure indicates that the cost of the litigation process in California is considerably greater than the budget of the workers' compensation agency for its nonadjudicatory functions.

18. CWCI *Bulletin* No. 86-3, April 24, 1986.

19. The Study Committee was created in 1983 and directed to report by November 1984. "The joint committee did not meet this deadline, the chairman retired from the Legislature, and the committee was not extended" (CSCS *Report*, 1986, p. 1). Under these apparently beneficial conditions, the staff produced an excellent 279-page report.

20. The committee staff relied on an earlier version of portions of chapter 10 of this study published by Burton and Vroman (1979).

21. National Commission on State Workmen's Compensation Laws, *Compendium on Workers' Compensation* (1973, p. 18). The 1910 law in New York was held unconstitutional by the Court of Appeals of New York, thus allowing Wisconsin its honor.

22. The passage is from the *Bulletin* of the Industrial Commission of Wisconsin, Vol. 1, No. 3 (July 20, 1912), as quoted in Gmeinder (1983, p. 12).

23. Nine jurisdictions (Arizona, the District of Columbia, Maine, Maryland, Michigan, New Hampshire, New York, Rhode Island, and South Dakota) pay nonscheduled permanent partial disability benefits for the duration of the disability without limits on the total amount of payments. Data for this note and the text are from U.S. Dept. of Labor, *State Laws* (1986).

24. In *Northern States Power Co. v. Industrial Comm.*, 252 Wis. 70 (1947) at Note 2, p. 76, the court stated that "since an award for permanent disability is to be made for all time . . . it must be based upon some sort of prediction as to impairment of earning capacity."

25. The latest data for the average weekly wage of workers covered by the Wisconsin unemployment insurance program are for 1984. In order to match the 18-year period over which benefits are compared in the text, wage data from 1966 were used to estimate the 182 percent increase in average weekly wages in the state (from $115.55 to $325.57). Wage data are from U.S. Dept. of Labor, Employment and Training Administration, *Handbook of Unemployment Insurance Financial Data, 1938-1976*, as supplemented by a 1986 release from U.S. Dept. of Labor, Bureau of Labor Statistics.

Chapter 8
Nonscheduled Benefits in Wage-Loss (Category III) States

We now consider nonscheduled permanent partial disability cases in the wage-loss states in our sample. Prominent among these is Florida, which is examined individually in chapter 9 because of its widely heralded 1979 wage-loss statute. But aspects of the wage-loss approach are also present in Pennsylvania, Michigan, New York, and Ohio, the states discussed in this chapter.

Definition of the Wage-Loss Approach

The definition of a "pure" wage-loss approach that follows is elaborate. Nonetheless, all of the dimensions of a wage-loss approach represented by the five traits we name must be recognized in order to accurately capture the differences among the states using the wage-loss approach.

Trait One. The wage-loss approach applies to the period after the date of maximum medical improvement (MMI), not to the period between the date of injury and the date of MMI. (See graph 2.1 in chapter 2.) In our terminology, the period between the date of injury and the date of MMI is the temporary disability period, and the period after the date of MMI is the permanent disability period.

Most states do not use this precise terminology in distinguishing between the temporary and permanent disability periods. Indeed, some states do not explicitly distinguish between temporary disability and permanent disability. Nonetheless, each state has to decide how to compensate workers after their medical conditions are stable whether they explicitly recognize that date or not, and we examine whatever approach each state uses to compensate workers after the healing period.

Trait Two. The wage-loss approach requires that as of the date of MMI, there is some remaining impairment or functional limitation that was caused by the work-related injury or disease. This requirement is true for all three categories of nonscheduled permanent partial disability

benefits, but needs emphasis here. It means that most workers' compensation cases cannot qualify for wage-loss benefits (or any type of permanent disability benefits), since the medical problems are temporary.

Trait Three. After the date of MMI, the worker's postinjury potential earnings are determined by projecting the preinjury wage into the period of permanent disability with adjustments to reflect what would have happened to the wage had the worker not been injured. These potential earnings (line BC in graph 2.1) are compared to his actual earnings (line FG) and the difference, which is defined as "true" wage loss due to injury, serves as the basis for the wage-loss benefits. Two outcomes are possible: (a) if the worker has no wage loss after the date of MMI, then *no* permanent disability benefits are paid; however, (b) if the worker does have wage loss after the date of MMI, then permanent disability benefits are paid that are related to the amount of wage loss (for example, the benefits could be 66 2/3 percent of the "true" wage loss).

Trait Four. Even in a pure wage-loss approach, it is recognized that some workers will voluntarily restrict the amount of their actual earnings after the date of MMI. It would be unfair to require the employer to pay benefits because of the worker's voluntary limitation of work activity. Therefore, even in a pure wage-loss approach the employer has the right to establish that the worker's earning capacity after the date of MMI is greater than the worker's actual earnings. This means that the compensable wage loss is the lesser of: (a) the worker's potential earnings minus the worker's actual earnings; or (b) the worker's potential earnings minus the worker's earning capacity.

Bringing in the notion of earning capacity makes this sound like the category II approach. But there is a crucial difference. In the category II approach, only the difference between potential earnings and earning capacity is considered in determining benefits; as a result, a worker can receive permanent disability benefits even if there is no actual wage loss so long as a decision is made that he has experienced a loss of earning capacity. A worker in the same situation receives no benefits under the wage-loss approach.

Trait Five. Under a pure wage-loss approach, a worker would be eligible for wage-loss benefits any time between the date of MMI and the worker's retirement age that the worker experiences true wage loss. Further, this extended period would not be limited by statute (for example, by a maximum duration on permanent partial disability benefits that could terminate benefits for some workers before their normal retire-

ment age) or by agreements between the parties to limit the period of eligibility (for example, by compromise and release agreements).

The preceding discussion of the wage-loss approach provides a "pure" version that no state altogether meets, although each of the traits is met (or at least approached) by one or more states. We are not suggesting that "pure" is best. We offer the definition only because it provides a model to which the laws in Pennsylvania, Michigan, New York, Ohio, and Florida can be compared.

Following are some of the ways that state laws deviate from the pure approach (these will be elaborated in subsequent sections).

1. The law does not measure "true" wage loss but "restricted" wage loss, as those terms are defined in graph 2.1. "True" wage loss requires that preinjury wages be escalated through time to simulate what the worker would have earned had the injury never occurred. In contrast, "restricted" wage loss takes the worker's wage as of the date of injury and projects this wage into the postinjury period without escalation. This deviation from the "pure" wage-loss approach characterizes most states.

2. The law considers only wage loss above a certain minimum amount to be compensable. Florida, for example, only compensates wage loss in excess of 15 percent of potential earnings.

3. The law restricts the eligibility period for wage-loss benefits. For example, the statute may terminate benefits for some workers before their normal retirement age even though their wage loss is continuing. Or the statute may require workers to establish their eligibility for wage-loss benefits within a certain period after the date of MMI.

4. The eligibility period may be restricted by private agreements between the parties. A common example is the compromise and release agreement (variously known as a redemption, washout, or "C & R"), whereby the worker receives a lump-sum payment and the employer is released from any further liability for the particular injury. Under such an agreement, the worker is obviously no longer eligible for wage-loss benefits even if actual wage loss occurs after the date of the agreement; this violates trait five of the "pure" wage-loss approach. Also, the lump-sum part of the settlement means that some workers receive benefits even though they experience no actual loss of earnings after the date of MMI—a

violation of trait three. Moreover, since the size of the lump-sum settlement is likely to reflect an estimate of future wage loss, the agreement essentially converts a *de jure* wage loss approach (category III) into a *de facto* loss of earning capacity approach (category II).

5. Finally, a "pure" wage-loss approach pays benefits only because of actual loss of earnings, not, for example, because of the mere existence of an impairment or functional limitation. A state may deviate from the pure wage-loss by awarding benefits above and beyond wage-loss benefits for certain injuries, such as amputations.

With this catalogue of traits and deviations in mind, we now turn to a review of the jurisdictions that have at least some elements of a wage-loss approach in their worker's compensation statutes.

Pennsylvania

Types and Levels of Benefits

In Pennsylvania, a worker who is out of work due to the consequences of an injury may receive what are termed "total disability" benefits for the duration of his total disability. As in other states, these benefits are calculated at two-thirds of the employee's preinjury weekly wage, subject to the statutory maximum ($347.00 on January 1, 1986). There is no stated number of weeks after which such total disability payments automatically cease. The law simply provides that "nothing in this clause should require payments of compensation after disability shall cease" (Section 306). If disability continues for the worker's entire life, the payments also continue. There is no distinction in Pennsylvania's law between "temporary total" and "permanent total" benefits, except for the statutory presumption that certain combinations of scheduled injuries constitute total disability. The statute provides, "Unless the Board shall otherwise determine, the loss of both hands or both arms or both feet or both legs or both eyes shall constitute total disability" (Section 306[b][23]).

If, as a consequence of the injury, the worker suffers a permanent impairment that is included on the schedule (say the loss of a hand), he receives, as an exclusive remedy, 66 2/3 percent of his wage during the stipulated period (335 weeks for one hand, for example) plus his total disability payments during a healing period defined by law. (The scheduled benefits are subject to a $347.00 per week maximum.) The

law provides that he is to receive, in addition to his scheduled award, payments during any period of disability "necessary and required as a healing period." The healing period ends either when the claimant returns to work without impairment in earnings or on the last day of the period specified in the schedule, whichever comes first. Thus, for the loss of a hand he would receive the benefits for 335 weeks as indicated, plus a maximum of 20 weeks for the healing period if he were out of work for that long.

There are three restrictive aspects of the schedule in Pennsylvania that are relevant for an understanding of the relationship between scheduled and nonscheduled cases. First, the schedule provides compensation only for total, not for partial, loss of most body members included in the list. In other states' schedules, by contrast, partial loss of the listed body members results in awards that are proportional to the extent of loss. (For example, in most states if the loss of the hand resulted in an award of 335 weeks, then loss of two-thirds of a hand would result in an award of 223 weeks. In Pennsylvania, partial loss of a hand is only evaluated in terms of the scheduled awards for loss of the fingers.) Second, the Pennsylvania schedule is largely confined to physical loss of the listed body members, and loss of use is not compensable as in most states' schedules. (Pennsylvania does allow loss of use to be compensated when there is a permanent loss of use of two or more body members.) These two restrictive aspects of the Pennsylvania schedule mean that a relatively large proportion of injuries with permanent consequences are not encompassed by the schedule and will receive permanent disability benefits only if they qualify for nonscheduled permanent partial (or permanent total) disability benefits. The third restrictive aspect of the Pennsylvania schedule is the limitation found in most statutes, namely the exclusiveness of scheduled benefits in the sense that an injury that qualifies for scheduled benefits cannot qualify for any other type of permanent disability benefits.

In the nonscheduled cases, if, in the words of the law, the "disability [is] partial in character" (Section 306 a), the worker is entitled to 66 2/3 percent of the difference between his preinjury wages and his "earning power" thereafter paid "during the period of his partial disability . . . but for not more than 500 weeks" (Section 306 b). If a period of total disability is followed by partial disability, the 500 weeks maximum period of partial disability is not reduced. The nonscheduled benefits were also subject to a $347.00-per-week maximum on January 1, 1986.

The administrative problems in Pennsylvania for nonscheduled cases revolve around determining when the period of total disability should end, and in determining the employee's earning power. The statute offers no guidance as to the former, but does for the latter. First, earning power "shall in no case be less than the weekly amount which the employee receives after the injury." "Further, the combined compensation and wage received are to be no more than the amount received by a fellow employee in employment similar to that in which the injured employee was engaged at the time of the injury" (Section 306 b).

The first condition—that of taking the actual wages as a floor to establish earning power—came as a result of a 1939 amendment. Before 1939, earning power could be less than actual postinjury wages if the worker could show that the reason for his higher wage was inflation, promotion, or some other reason not connected with his permanent injury. Today, if a worker who earned $200 a week before his accident returned after his period of total disability to a job that paid $110 a week,[1] he would be entitled upon showing the necessary proof to a benefit of $60, which is two-thirds of the difference between his wage before his injury, $200, and his present wage of $110.

If his wage remained at $110, he would continue to receive the $60 a week benefit for the maximum duration of 500 weeks. If, however, his wage gradually increaseed, his benefits would correspondingly decrease and, once his earnings reached $200, cease. The termination of benefits occurs regardless of the reason for the increase in wages.

As noted by a judge of the Court of Common Pleas, "It seems paradoxical that, while statutory changes to benefit employees and to account for inflationary forces have been repeatedly enacted by the legislature since 1939, this post-injury disadvantage to partially disabled employees has remained unchanged since 1939 and throughout most inflationary times" (Barbieri 1975, pp. 46-47).

Obviously, for those employees who return to a job, the establishment of actual wages as an indicator of earning power, however unfair, does simplify the administrative task of determining "earning power." The problems become more complicated for an employee who does not return to a job. The difficulty is in assessing whether his loss of earnings results from his injury. Although his actual earnings are zero, his earning power may be a good deal more. The employer or the insurance carrier is likely to claim that his lack of a job has nothing to do with the work-related injury.

Procedures

In Pennsylvania, within 21 days after an insurance carrier is notified of an injury, it must submit a form indicating acceptance or denial of the claim. If the carrier accepts the claim, it is supposed to begin payments of total disability benefits promptly. Any change in the status of the claim, including a stoppage of payments because the employee returned to work or because the carrier believes that he is capable of returning to work, requires notice to the claimant and to the agency. Once total disability benefits begin, they normally continue until the employee recovers and is back to work. The carrier then files a final receipt of compensation form that requires the signature of the employee. If the employee refuses to sign, say on grounds that he continues to be totally disabled, the carrier must then petition the agency to terminate or modify the benefit payments.

If an employer's petition to stop or modify payments alleges either that the employee has returned to work at the same or higher wages or that he is fully recovered as attested to by a physician's affidavit, the carrier may stop or modify the payments and await a final determination by a referee. Provisions may be made for an expedited hearing to determine the issue. If the employee has not returned to work, the burden of proof for establishing his employability at a certain wage falls on the employer. As in those states where the criteria center around impairment or measures of functional limitation, the controversy centers around conflicting medical evidence and physicians' estimates of the employee's ability to work. The referee is called upon to make a decision based on the medical and lay testimony before him.

When the extent of impairment is not resolved but the employee is not suffering any current wage loss, the referee can order a suspension of benefits. The suspension in effect imposes a 500-week rather than a three-year time limit within which the case can be reopened if actual wage loss occurs. This is a common procedure in back cases.

Of course the parties may agree as to the nature and extent of the impairment or functional limitation and disagree about the significance of that condition for the employee's chances in the labor market. Conflicting medical testimony is usually supplemented by employment experts' testimony as to the availability of jobs within a reasonable distance from the employee's home for workers with the claimant's impairment and functional limitation. The referee must decide on the basis of the evidence before him whether it is reasonable to conclude that the claim-

ant could return to some job. In some instances, the hearing is adjourned to give the claimant an opportunity to test the labor market, although the referee's decision will not always turn on the actual results of that job search. Of course, if the employee does get a job that pays as much as his former wage, that eliminates his claim for wage-loss benefits. In general, however, in Pennsylvania, if the claimant's physician testifies, based on some reasonable evidence, that his patient is unable to return to work, the employer's task of proving otherwise is a difficult and time-consuming one.

Although statistics on litigation are difficult to interpret on a comparative basis, they do suggest that Pennsylvania is not an overly litigious state. There are 13 states with data on attorney representation available from the National Council on Compensation Insurance (*Claims Characteristics* 1984, p. 3). For all types of claims, 2 percent of all claimants are represented by attorneys in Pennsylvania (a record matched only by Wisconsin), well below the 13-state average of 8 percent. For permanent partial claims, Pennsylvania has the lowest percentage of attorney representation—7 percent, compared to the 13-state average of 23 percent.

Compromise and Release Settlements

In spite of a wage-loss statute under which claims remain open for an indefinite period of time, Pennsylvania is not plagued with a rash of compromise and release settlements.

The director of the Bureau and the attorney general have interpreted Section 407 of the statute as constituting a complete bar to compromise and release settlements. Section 407 states (in part):

> the employer or insurer and employee or his dependents may agree upon the compensation payable to the employee or his dependents under this act, but any agreement . . . permitting a computation of a payment contrary to the provision of this act, or varying the amount to be paid or the period during which compensation shall be payable . . . shall be wholly null and void. . .

A referee (Stander 1976) has pointed out that the "tortured syntax" of the section makes possible interpretations other than the prevailing one, which bars any compromise and release settlements. The rationale for such settlements is eroded due to the provisions that allow reopenings in cases where settlements have been reached. In a 1975 case,

General v. Roseman and Company, 343 A. 2d 683, the claimant was awarded compensation beyond that stipulated in a prior settlement to which he had agreed. The amount of the settlement was credited against the compensation benefits the court found appropriate.

The formal ban on compromises has not eliminated all settlements. They still can be implemented by agreeing to stipulations to dismiss or withdraw pending petitions, which can be done without disclosing any details of the settlement. The incentive for the carrier or employer to enter into such settlements is dulled, however, by the knowledge that such settlements are not accompanied by binding releases. The claimant can file a petition any time within the statute of limitations and reopen the matter for adjudication and determination.

Experience with Permanent Disability Benefits in Pennsylvania

Pennsylvania's experiences with permanent total disability cases and with permanent partial disability cases contrast sharply. Throughout 1958-82, the number of permanent total cases as a share of all cash benefit cases was relatively high in Pennsylvania (table 3.6). In 1982, for example, the state had 173 permanent total cases, a number exceeded in only two other jurisdictions for which the National Council on Compensation Insurance collects data.[2] These cases accounted for 0.31 percent of all Pennsylvania cash benefit cases, which was 209 percent of the national average share for permanent total cases that year (table 3.6). Not only were these cases numerous, they were expensive. In 1982, for example, the average cost of a permanent total case in Pennsylvania was $180,187, which was 96 percent above the national average of $92,055 for permanent total cases that year (table 3.10). Altogether, Pennsylvania's 1982 permanent total cases cost $31,172 million, which represented 11.27 percent of all cash benefits that year—the second largest share of cash benefits accounted for by permanent total disability cases among the 45 jurisdictions included in table 3.5.

Pennsylvania's experience with permanent partial disability benefits is quite different. Although the average costs of both major and minor permanent partial cases have been relatively high since 1973—as of 1982, major cases had average costs of $78,575, which was 313 percent of the national average (table 3.11), while minor permanent partial cases averaged $9,176, some 185 percent of the U.S. average (table 3.12)—the numbers of permanent partial cases in Pennsylvania have been relatively low. In 1982, for example, major permanent partial cases accounted for only 1.40 percent of all cash benefit cases in Pennsylvania, a share

that was only 21 percent of the U.S. average share for such cases (table 3.7). Similarly, minor permanent partial cases accounted for only 9.86 percent of all cash benefit cases in Pennsylvania, which was 57 percent of the national average share for minor permanent partial cases (table 3.8). The relatively low number of permanent partial cases more than offset the high average costs of those cases, resulting in a total cost that, as a share of all costs for cash benefits, was relatively low; in 1982, the Pennsylvania share of all costs for major cases was only 52 percent of the national average share (table 3.15), while the state's share of all costs for minor cases was only 82 percent of the national average share (table 3.16).

The data just cited, which are from the National Council on Compensation Insurance, do not distinguish between scheduled and nonscheduled permanent partial cases, and any conclusions drawn from them must be somewhat speculative. It appears that the relatively restrictive schedule in Pennsylvania, plus the requirement that nonscheduled cases be paid only when there is actual wage loss, substantially limit the number of cases that qualify for benefits, while those cases that do qualify involve serious wage loss and thus the average costs are high. In short, one possible outcome of a limited schedule plus a wage-loss approach for nonscheduled benefits is to channel most of the permanent disability benefits to a relatively small number of workers, with the overall cost of the permanent disability benefits in the state below the costs in most jurisdictions. This is true in Pennsylvania even when the relatively expensive permanent total disability benefits are added to the costs of the major and minor permanent partial benefits: all three types of permanent disability cases accounted for only 51.64 percent of all cash benefits in the state in 1982, a share that was only 75 percent of the national average share for permanent disability cases that year (table 3.17) and that was the lowest share among the eight jurisdictions with comparable data that we are intensely examining (graph 3.1).

Pennsylvania's record of a low share of all cash benefits accounted for by permanent disability cases has persisted since 1958, compared to the national average (table 3.17) and the rest of the eight states (graph 3.1). The cost of workers' compensation insurance in Pennsylvania has also been consistently below the national average since 1958 (table 3.18). Pennsylvania's experience thus supports the general relationship shown in graph 3.2—employers' costs of workers' compensation insurance tend to be lower in jurisdictions with a lower share of cash benefits accounted for by permanent disability cases.

Michigan

Workers' compensation in Michigan has experienced recurrent turmoil and criticism for decades. A continuing complaint of employers has been the high cost of workers' compensation in Michigan, a charge that changed from ill-founded to accurate between 1958 and 1978 (table 3.18). Three separate study commissions were appointed in the 1960s and 1970s with little success. Then a series of amendments were enacted in 1980 and 1981 that made significant changes in the criteria and procedures for permanent disability benefits. In January 1983 open competition for workers' compensation insurance rates became effective. Despite these significant changes, which will be reviewed in this section, pressures for additional amendments did not completely dissipate. Partly in response to these pressures, in 1983 Governor Blanchard appointed Theodore J. St. Antoine as Special Counselor on Workers' Compensation. St. Antoine in his report (1984, p. 21) concluded that "it is entirely too soon to seek further major amendments affecting the substantive rights of employers or employees," but he did recommend significant changes in administrative structure and procedure. Many of St. Antoine's recommendations were included in 1985 legislation, which is discussed below. The legislature only partially heeded St. Antoine's advice to delay further amendments to the substantive criteria for benefits: no changes were enacted in 1985 but crucial sections dealing with wage-loss benefits are subject to a May 15, 1987, sunset provision. Whether that date will be extended or substantive amendments made before then is unclear as of early 1987, when this chapter was completed.

Throughout these decades of strife, the wage-loss approach for workers with permanent disabilities has been one focus of attention. The Michigan approach was cited with favor by the National Commission on State Workmen's Compensation Laws (1972, p. 69), but subsequently was described as "a sullied wage-loss approach at best" by the National Commission's former chairman (Burton 1983, p. 26). Michigan's problems with wage-loss benefits primarily relate to the fourth and fifth traits of the approach provided earlier in this chapter: the ability of the employer to establish that the worker's earning capacity is greater than his actual earnings, and the use of redemptions (compromise and release agreements) to terminate eligibility for benefits for subsequent wage loss.

Administrative Structure and Procedures

Michigan is a direct payment state. The employer is required to file a report in all compensable cases. When the carrier begins payment, it sends the Bureau a notice to that effect. The Bureau is the administrative body located within the Department of Labor. It is headed by a director who is appointed by the governor with the advice and consent of the Senate for a period of three years.

The "old" administration. Many of the administrative features will be affected by the 1985 amendments. There is a two-tier structure for decisionmaking in contested cases. Initial hearings are conducted by a hearing referee, who must be an attorney and who is almost always referred to as an administrative law judge (ALJ). In recent years, there have been about 30 ALJs, who are Civil Service personnel appointed by the director of the Bureau.

Parties have the right to appeal the ALJ's decision to the Workers' Compensation Appeal Board, which consists of 15 members, a majority of whom are required to be attorneys-at-law. Five members are representatives of employee interests, five of employer interests, and five of the general public. The chairperson of the Board is designated by, and serves at the pleasure of, the governor. Matters pending in review are assigned to a panel of three members of the Board for disposition, with each panel consisting of one representative from each of the interest groups.

St. Antoine (1984, pp. 67-78) documented several problems with the procedures. For the last two decades, the average time from application for a hearing to the actual hearing ranged from about a year to 15 months. Once the ALJ decisions were made, they routinely were carried to the Appeal board—indeed, between 75 and 85 percent of all ALJ awards were appealed in the last decade. This had caused the Board's backlog "to mushroom from a mere 2,000 cases in 1976 to almost 7,000 as of November 1984 . . . which is the equivalent of about five or six years' output by the Appeals Board" (St. Antoine 1984, p. 68).

St. Antoine termed the delay "simply intolerable." One major explanation in his view was that the reviews by the Appeal Board were *de novo*, with both determinations of fact and law subject to a "whole fresh look." Even though the ALJs were affirmed in about 75 percent of the cases, "the very notion of *de novo* review . . . is an open invita-

tion to disappointed litigants and their lawyers to retry the case from scratch'' (St. Antoine 1984, p. 69).

St. Antoine recommended that findings of facts by ALJs be conclusive if supported by competent, material, and substantial evidence on the whole record. He also recommended that the selection procedure for ALJs be modified by use of a bipartisan ALJ Qualifications Advisory Committee. Further, he recommended that a new five- or possibly seven-member Appeal Board be created to replace the old 15-member Board, with members all to be lawyers screened by a Qualifications Advisory Committee before appointment.

The ''new'' administration. The essence of St. Antoine's recommendations were enacted by the legislature in 1985. The first level of decisions were to be by magistrates, of whom 30 may be appointed by the governor with prior recommendation from the qualifications advisory committee. A seven-member appellate commission was established, again with all members to be lawyers screened before appointment by the Qualifications Advisory Committee. Effective October 1, 1986, the finding of fact made by a magistrate was to be considered conclusive by the appellate commission ''if supported by competent, material, and substantial evidence on the whole record'' (Sec. 861a[3]), thus ending *de novo* reviews.

The 1985 legislation provided for the position of hearing referees to be abolished as of March 31, 1987, with the initial magistrates to be appointed no later than March 31, 1986, and there were overlapping provisions for other aspects of the old and new administrative procedures. One feature of the 1985 law challenged by the Civil Service Commission and the ALJs was the switch to a system of magistrates appointed by the governor. After a circuit court decision ruled against the provision, the Supreme Court upheld its constitutionality in March 1986.[3] Because of the delays caused by the legal challenge, the new magistrates could not be appointed before late 1986. Thus the new administrative process began with almost a year's backlog of cases by the time it became operative.

Types and Levels of Benefits

Total Disability Benefits. Effective January 1, 1982, Michigan discarded 66 2/3 percent of preinjury wages as the basis for the weekly amount of total disability benefits in favor of a formula that calculates benefits as 80 percent of the employee's after-tax average weekly wage, sub-

ject to a maximum of 90 percent of the state's average weekly wage. The maximum weekly benefit in January 1986 was $375.00. "After tax" wages are defined as gross weekly wages reduced by federal and state income taxes and the Federal Insurance Contributions Act tax (social security contribution), using the standard deductions and the exemptions calculated according to the number of the employee's dependents.

Michigan's act provides for permanent total disability when the worker experiences a loss of two major members; or permanent and complete paralysis of both legs or both arms or one leg and one arm; or incurable insanity or imbecility; or permanent and total loss of industrial use of both legs or both hands or both arms, or one leg and one arm. The statute provides that the conclusive presumption of total and permanent disability shall not extend beyond 800 weeks from the date of injury, and "thereafter the question of permanent and total disability shall be determined in accordance with the fact, as the fact may be at that time" (Sec. 351).

Scheduled Benefits. Michigan has a schedule in its law that lists the extremities normally covered, such as arms, hands, and fingers. The law provides (Section 361) that the disability "shall be considered to continue for the period specified" in this schedule and during that time the employee is to be paid compensation at 80 percent of his after-tax average weekly wages, subject to the minimum and maximum weekly benefits ($104.05 and $375.00, respectively, as of January 1986).

The Michigan schedule is rather restrictive because it applies only to physical loss of the listed body members, not loss of use, as in most states' schedules. Also, the schedule provides compensation only for total loss, not partial loss, of most body members included in the list. These aspects of the Michigan schedule are at least as restrictive as the corresponding provisions in the Pennsylvania schedule. (The Pennsylvania law does compensate for loss of use when multiple body members are involved.) Unlike the Pennsylvania schedule, however, the Michigan schedule is not exclusive, because workers who experience continuing wage loss after periods specified in the schedule are eligible for further benefits based on the wage-loss approach.

Partial Disability Benefits. The Michigan statute (Sec. 361) does not distinguish between temporary and permanent partial disability. In either case, weekly benefits are 80 percent of the difference between the worker's after-tax average weekly wage before the personal injury and the after-tax average weekly wage "which the employee is able to earn

after the personal injury," subject to a maximum benefit that is 90 percent of the state's average weekly wage ($375.00 in January 1986). The benefits are paid for the duration of the disability. The partial disability benefits represent a form of wage-loss benefits potentially payable for life.

The legal requirements for these wage-loss benefits are extraordinarily complex and the impact of the 1980, 1981, and 1985 amendments is unclear; we attempt a brief overview relying in large part on St. Antoine (1984, pp. 23-35).

The definition of the wage-loss approach provided earlier in this chapter involved several requirements, including: (1) there must be some remaining permanent impairment or functional limitation at the date of MMI; (2) there must be actual wage loss after the date of MMI, which is calculated by subtracting postinjury actual wages from postinjury potential earnings; (3) wage-loss benefits are calculated by subtracting postinjury earning capacity from postinjury potential earnings when postinjury earning capacity exceeds postinjury actual wages.

Michigan has, in effect, added an additional requirement, namely: (1B) the impairment or functional limitation must cause a disability, which means a loss of earning capacity by the employee. Earning capacity thus appears in two of the Michigan requirements: (1B), where the employee must show that the injury caused some loss of earning capacity, and (3), where the employer must show that earning capacity is greater than postinjury actual wages.

Michigan requirement (1B) has a history that Arthur Larson has described as "sheer freakishness."[4] The courts defined disability as the loss of earning capacity in the work the employee was doing at the time of injury. Moreover, a distinction was drawn between a skilled worker—who was considered totally disabled if he could not resume his former job—and an unskilled worker—who was considered only partially disabled so long as he could perform some job in the field of common labor. The 1981 amendments added a definition of disability (Sec. 301[4]), namely, "a limitation of an employee's wage earning capacity in the employee's general field of employment resulting from a personal injury or work related disease." The apparent intent was to remove the distinction between skilled and unskilled workers and to generally make it more difficult for a worker to establish that he is disabled. St. Antoine (1984, p. 25) has expressed doubt, however, that the new 1981 definition of disability will have much impact.

One reason for St. Antoine's skepticism about the practical impact of the change in definition of disability is that once any degree of disability is established—however slight—the worker may qualify for full wage-loss benefits (St. Antoine 1984, p. 26). To restate in terms of our framework, a 1 percent or greater permanent impairment will fully satisfy requirement (1) for wage-loss benefits; and, in Michigan, a 1 percent or greater disability will fully satisfy requirement (1B).

The second requirement for wage-loss benefits—that actual wage loss exists after subtracting actual postinjury earnings from postinjury potential earnings—is encompassed in several sections of the Michigan statute (St. Antoine 1984, p. 26).

Michigan's most noteworthy contribution to the quest for an operational wage-loss approach involves the handling of requirement (3): employers can reduce their liability for wage-loss benefits by demonstrating that postinjury earnings capacity is greater than postinjury actual wages. There are a number of elements to the Michigan scheme. Since the 1981 amendments, if the employee refuses a bona fide offer of reasonable employment without good and reasonable cause (Sec. 301.[5][a]), the worker is not entitled to wage-loss benefits during the period of refusal. In effect, there is a conclusive presumption that the refusal of a reasonable job means that postinjury earning capacity is equal to postinjury potential earnings.

The most difficult aspect of requirement (3) involves the question: if the worker is employed after the injury, do the earnings from that job establish a postinjury earnings capacity that will continue to be used to calculate wage-loss benefits if the worker subsequently loses his job? A simple example may help: a worker earns $500 a week in 1986; is injured in 1987 and has no earnings that year and receives benefits based on $500 of earnings loss; returns to work at $300 per week in 1988 and receives wage-loss benefits based on the $200 of actual wage loss; and then has no earnings in 1989. Question: are the wage-loss benefits in 1989 based on $200 or $500 of earning loss?

The Michigan answer is: it depends! Prior to 1981, a distinction was drawn between "favored work," which was essentially a temporary position that made limited demands on the worker because of his injury, and "recognized regular employment." The former did not establish a postinjury earning capacity, whereas the latter did. Unfortunately, this distinction was overlaid with a concern about why the postinjury job was terminated—if the employee was responsible, he

would be treated as having established a postinjury earning capacity; otherwise, he would not (St. Antoine 1984, pp. 30-31).

The Legislature dealt with the issue of how postinjury earning capacity is established in 1981. Sec. 301(5)(e) provides that if the postinjury employment period is less than 100 weeks and the employee "loses his or her job for whatever reason," then (in effect) postinjury earning capacity is zero for the period subsequent to the job loss. As noted by St. Antoine (1984, p. 33), this appears to be more favorable to the employee than the law prior to 1981, since an employee who voluntarily quits during the 100 weeks can take advantage of the provision. St. Antoine recommended that the defect be remedied, which was not accomplished in 1985. Sec. 301(5)(d) provides that if the postinjury employment period is between 100 and 249 weeks and the employee loses his job "through no fault of the employee" and the employee exhausts his unemployment benefit eligibility, then (in effect) postinjury earning capacity, *if any*, will be determined by the worker's compensation magistrate or hearing referee. That postinjury earning capacity apparently is "the normal and customary wages paid to those persons performing the same or similar employment" as the injured worker was performing in the postinjury period. Unfortunately, the language of Sec. 301(5)(d) is sufficiently confusing that other interpretations are possible, but we agree with St. Antoine (1984 at p. 34) that this is the most reasonable interpretation of the legislature's intent for those workers with 100-249 weeks of postinjury employment. As for the worker with 250 or more weeks of postinjury employment who then becomes unemployed for any reason, Sec. 301(5)(d) provides that "there is a presumption of wage earning capacity established." This means the magistrate or referee must find a postinjury earning capacity equal to "the normal and customary wages paid to those persons performing the same or similar employment" as the worker was performing after the date of injury.

The 1981 amendments have not received extensive interpretations and their ultimate significance is thus hard to assess. St. Antoine (1984, p. 35) suggests that, compared to previous case law, they seem to make disabled workers better off during the first two years on a postinjury job, to make little difference for the next three years, and to treat injured workers with five years of postinjury employment no better than other workers. He concluded that, while the statute could stand some clarifying amendments, the underlying rationale for the 1981 amendments is sufficiently defensible to justify an extended trial period before

additional significant changes are made in the wage-loss provisions of the statute. Whether St. Antoine's advice will be heeded remains to be seen. In any case, his trenchant analysis of the evolution of the wage-loss approach in Michigan provides valuable guidance to those in other jurisdictions. One possible "lesson" we draw is that the parameters of the wage-loss approach may require detailed legislation rather than reliance on the courts to flesh out the operational details. Although the 1981 amendments are not free of ambiguity, the effort to delineate in a statute the meaning of postinjury earning capacity seems preferable to relying on sporadic court pronouncements.

Retirees

The recent amendments also dealt with the problem of retirees. Michigan was awarding a large portion of its compensation dollars to individuals who voluntarily retired and then filed for benefits alleging wage loss as a result of a prior injury or exposure.

The problem had its origin in 1956, when some of the United Automobile Workers' agreements eliminated pension benefit offset against workers' compensation. Under the newly negotiated provision, the worker could receive both a workers' compensation benefit and his full pension benefit. In 1960, court decisions liberalized the statute of limitations for the notice required of a worker to an employer of a work-related injury. Claimants and their attorneys, taking advantage of these developments, began to file claims on behalf of retired workers alleging wage loss due to some prior injury. These began as contested claims, since no initial report of injury or notice of beginnings of payment had been filed. The argument made to justify benefits was that the retired worker could not find another job because of a work-related injury. Many of the earlier cases were filed by foundry workers with impairments of the lungs, heart, or back. The incentives to file such claims grew after 1965 amendments removed the duration limits for total disability payments.

A single attorney could represent a large number of clients and negotiate a bulk settlement with representatives of the automobile companies. Hundreds of these cases were redeemed in a type of class action. Employees received some predetermined amounts, and the employers disposed of a number of claims in the least expensive way, given the interpretation of the law.

Some UAW representatives interviewed at the time of our 1976-77 field work indicated they were anxious to find some solution to the retiree problem, since it held back reform of other aspects of the law. With possibly some understandable exaggeration, they spoke of workers inquiring about their pensions and workers' compensation benefits at one and the same time; a workers' compensation settlement became a form of retirement bonus.

One ingredient that complicated the problem in Michigan was the early retirement plan in the automobile industry. Many retirees were in their fifties and looked forward to another job, if only on some part-time basis. If they could not find that job, for example because of a failure to pass a physical examination due to a bad back or decreased lung capacity, they had the basis for a workers' compensation claim on a wage-loss basis. Because court interpretations had lessened the need to show the occurrence of an accident, it was more difficult for the employer to demonstrate that the pre-retirement job was not the proximate cause of the worker's condition. The worker's case was strengthened because the employer could not demonstrate the employee's fitness by offering him a job, since the labor contract had provisions that made it difficult to rehire a retired and pensioned worker. Such a case was ripe for redemption, and that was the path followed in Michigan.

The retiree problem is not inherent in the wage-loss approach but grew out of conditions peculiar to Michigan. The ingredients were (1) a low retirement age in the principal industry, (2) the relaxed requirement for showing the occurrence of an accident and liberal interpretations of the statute of limitations, and (3) the practice of redeeming wage-loss cases in order for the employer to avoid potential liability of an uncertain amount and duration.

The 1980 and 1981 amendments contained a frontal attack on the retiree problem. Section 373 of the Act provides that an employee who has terminated active employment and is receiving either a governmental or a private pension paid by an employer from whom workers' compensation benefits are sought is presumed not to have suffered a loss of earnings or earning capacity as a result of a compensable injury or disease. The presumption may be rebutted by a preponderance of evidence that the employee is unable to perform work suited to his qualifications because of the work-related disability.

The retirement problem came about because of liberal interpretations of the notice of accident requirement. Under the recent amendments,

notice of accident must be given within 90 days and claims for compensation must be made within two years of the date of injury or, in the case of occupational disease, within two years of the time the employee knows or should have known of the disability and its work-relatedness.

A "coordination of benefits" provision, another recent amendment, will also affect the amount of workers' compensation benefits received by retirees. Effective March 31, 1982, benefits are reduced by the amounts received from a private pension or disability insurance plan. In addition, 50 percent of an old age insurance benefit from Social Security is to be deducted from the net workers' compensation benefits. If an employee is eligible to receive such an old age retirement benefit from Social Security at his normal retirement age, he is obligated to apply for that benefit. A controversial Michigan Supreme Court decision, *Franks v. White Pine Copper Div.*, 422 Mich. 636, 375 N.W.2d 715 (1985), held that the coordination provision applies not only to workers injured after March 31, 1982, but to workers injured before that date. The decision was estimated to affect as many as 40,000 workers, in some instances completely eliminating their workers' compensation benefits,[5] and efforts to amend the law so as to remove the retroactive application of the benefits coordination provision have been mounted, without success as of early 1987.

The retirement problem will also be affected by Sections 301(2) and 401 (2), under which conditions of the aging process are deemed to be compensable only if they are contributed to, aggravated by, or accelerated by the employment in a significant manner. These provisions of the act should go a long way toward eliminating simultaneous receipt of retirement pensions and workers' compensation benefits.

Redemptions

We include Michigan in this chapter devoted to jurisdictions that use the wage-loss approach, and the National Commission *Report* (1972, p. 69) so described the state. Whether this is an accurate characterization depends in large part on the importance attached to compliance with trait five of a wage-loss approach (provided earlier in this chapter), which requires an extended period of eligibility for the wage-loss benefits.

The problem has been succinctly stated by St. Antoine (1984, p. 58):

> Under the Michigan "wage loss" theory, one might expect that the standard award would require the payment of weekly benefits during the period of an employee's disability and continuing lack of work. In fact . . . more than half the total dispositions in contested workers' compensation cases have consisted for many years of compromises or so-called "redemptions," usually in the form of lump-sum settlements. Typically, a redemption terminates all further employer liability for income maintenance, medical benefits, and vocational rehabilitation. The practical effect is to transform the Michigan wage loss system, in many cases, into a modified impairment rating system.

The problems with redemptions have long been recognized in Michigan. During our field work for the NSF report (Berkowitz, Burton, and Vroman 1979) almost a decade ago, criticism was received from several quarters. The labor representatives we interviewed felt that the law should be amended to limit redemptions because of the risks for the worker who redeemed all future benefits. Concerns were expressed that these redemptions could be very disadvantageous to the worker in the long run, especially to workers who face the prospect of continuing medical care expenses. Insurance representatives were not happy with the high number of redemptions, but felt that in light of the way the law was administered, it was financially prudent to close out cases as rapidly and as inexpensively as possible.

The 1981 legislature stared down the problem. Section 836, to be effective January 1, 1984, consisted of a single sentence: "For any petition filed after the effective date of this section, entitlement to workers' compensation benefits under this act shall not be redeemed."

The 1983 legislature blinked. Section 836 was repealed and redemptions were again authorized, subject, however, to a new and stricter system for approval. Hearing referees are required to consider a variety of factors, including the intended use of the proceeds, before approving the agreement as being in the "best interests of the injured employee" (Sec. 836), and each party to the agreement must pay a $100 fee to the bureau (Sec. 835). Nonetheless, the discount rate used to commute the future payments to their present worth for determining the amount of the lump-sum settlement is 12 percent—a rate unlikely to severely dampen the employer or carrier interest in a redemption settlement.

The new procedures for redemptions became effective on January 1, 1984, and assessment of the effect is premature, although St. Antoine (1984, p. 58) reported that redemptions represented 54.4 percent of dispositions in the first nine months of 1984—only marginally better than in the previous five years. Nonetheless, St. Antoine concluded that further stringent restrictions on redemptions were unfeasible at this time because of the enormous backlog of cases. He was also encouraged by the close scrutiny being given by ALJs to proposed agreements under the new act. His ultimate advice (p. 59) bears repeating: "This whole area has enough potential for abuse, however, that it calls for continuing surveillance."

Experience with Permanent Disability Benefits in Michigan

The costs of workers' compensation in Michigan have been of concern to employers and others in the state for decades. Indeed, one of the authors of this study became involved in workers' compensation research because of a fear expressed in the early 1960s that high workers' compensation costs were affecting plant-location decisions in Michigan. His earlier study (Burton 1966, p. 73) concluded that "the actual magnitude of the interstate differentials in employers' costs of workmen's compensation should not influence plant location decisions." This conclusion seemed particularly appropriate for Michigan at the time, because Michigan's workers' compensation costs were not out of line with those in other states. One measure of the cost of the workers' compensation program is the percentage of payroll devoted to workers' compensation premiums by a representative sample of employers. In 1965, the premiums for Michigan employers were equivalent to 0.715 percent of payroll, below the average cost of 0.791 percent of payroll in the 28 states for which comparable data are available (table 3.18).

This relatively sanguine situation for Michigan employers did not last, however. By 1972, insurance premiums for workers' compensation represented 0.914 percent of payroll in Michigan, which was 17 percent above the average (0.783) in the 28 jurisdictions. Costs continued to escalate rapidly in Michigan, and by 1978 Michigan employers were expending 1.890 percent of payroll on workers' compensation premiums, compared to the 28-jurisdiction average of 1.460 percent. Thus by 1978 Michigan employers were spending 33 percent more on workers' compensation than comparable employers in the other jurisdictions.

The rapid increase in Michigan workers' compensation costs between 1972 and 1978 is particularly interesting because the benefit levels

prescribed by the Michigan law lagged during this period. For example, in terms of the maximum weekly benefit for temporary total disability, as of 1972, when one state (Arizona) had a maximum that was at least 100 percent of the state's average weekly wage, Michigan's maximum for temporary total of $79.00 was 50 percent of the state's average weekly wage. By 1978, Michigan's temporary total maximum had increased to $171.00, which was 64 percent of the state's average weekly wage, but by then 24 jurisdictions had increased their maximums for temporary total disability benefits to at least 100 percent of the state's average weekly wage (U.S. Dept. of Labor, *State Compliance*, 1982). The relatively slow increase in maximum benefits in Michigan during this period is explained in part by the employers' reactions to the escalating costs of the program, which in turn they related to "abuses" of permanent disability benefits, such as the retiree problem.

The magnitude of Michigan workers' compensation costs during the 1970s do appear to be largely due to permanent disability benefits. Surprisingly, at one level it is hard to identify an adverse trend in Michigan's experience with permanent disability benefits during this period. For example, the share of all cash benefits accounted for by all types of permanent disability benefits in Michigan was consistently below the national average share for such cases from 1968 to 1978 (table 3.17).

Michigan's problems with permanent disability benefits become more apparent as the data are disaggregated, however. The pattern over time of permanent total disability benefits, for example, helps to explain why Michigan had a deserved reputation as a problem state. Michigan was the only state that failed to meet recommendation R3.11 of the National Commission on State Workmen's Compensation Laws, which limited permanent total disability benefits to those workers who did not retain substantial earning capacity. By 1978, 0.45 percent of all Michigan cases were permanent total cases, which was 331 percent of the national average share and the highest share of the eight states intensively analyzed in chapter 3. (See table 3.6.)

The problems with permanent partial disability benefits in Michigan are less obvious than the permanent total problem. A few comparisons with Pennsylvania will help to put the problem in relief. Because Michigan has a restrictive schedule roughly comparable to that in Pennsylvania, and both states have a statute that purports to base nonscheduled benefits on a wage-loss approach, a comparable experience with permanent partial cases in the two jurisdictions could be expected. In fact,

there was a significant difference in 1978 in the share of all cash benefits accounted for by permanent partial disability cases (major and minor) in the two jurisdictions: 39.45 percent in Pennsylvania and 60.40 percent in Michigan (tables 3.15 and 3.16).

How is it that two states with similar statutory approaches to permanent disability benefits had such different experiences with the numbers and costs of these benefits? The answer in large part appears to be that whereas the theory and practice of wage-loss benefits are largely congruent in Pennsylvania, in Michigan the practice often deviates from the theory. In theory, except for those few cases handled entirely by paying scheduled benefits, permanent partial disability benefits in Michigan were supposed to be paid only when the worker experiences an actual loss of earnings because of the work injury, and those benefits are supposed to continue for the duration of the wage loss and cease when wage loss ends.

The practice in Michigan was captured by Hunt's study (1982) of Michigan workers' compensation cases closed in 1978. Hunt found that some cases were in fact handled as the theory dictates, with benefits paid over an extended period, but many were not. The cases typically were litigated and ended in redemptions, with the employer released from further liability and the worker given a settlement with the amount related, at least loosely, to the extent of loss of earning capacity.[6] The redemption settlement was not conditioned upon the worker showing an actual loss of wages due to the injury, with the most extreme example being the redemptions for retirees.

How significant are these interrelated phenomena of litigation and redemption settlements? Hunt found (p. 183) that nearly three-fourths of all Michigan claims were voluntarily paid by the insurers. Among serious injury cases, however, litigation and redemption settlements are the dominant approach. Overall, Hunt found (at p. 189) that "*60 percent* of all the compensation paid over the lifetime of these closed cases was paid in lump sums rather than weekly payments." Thus, even though, as Hunt observes (p. 184), "in a theoretical context, the wage-loss principle and lump-sum settlements are generally regarded as mutually exclusive," the practice in Michigan clearly was dominated by these lump-sum settlements. Moreover, Hunt estimated that from 25 to 35 percent of all litigated cases in Michigan were filed by retirees, and that they received a minimum of 18 percent of all the indemnity payments reported in the study.

The litigation-redemption-lump-sum nexus took a particularly heavy toll on the theory that permanent partial benefits in Michigan were paid on a wage-loss basis. Whatever the theory, and however the statute reads, the practice in Michigan had converted the permanent partial benefit scheme into a perverse variant of a loss of wage-earning capacity approach.

What needs to be stressed is that the fate of the wage-loss approach in Michigan was not inevitable. Stretching the wage-loss concept to compensate retirees for earnings they never would have earned even if they had never been injured is an aberration of the wage-loss approach, as the Pennsylvania experience demonstrates.

The failings of the Michigan workers' compensation program as of 1978 precipitated a number of reforms described, in large part, earlier in this section. There were multiple strategies and purposes, including the tightening of the definition of disability in order to reduce the number of total disability cases, the introduction of open competition for insurance rates in order to reduce costs, and the elaboration of the criteria for redemptions in order to discourage their use. These changes are still working their way through the system in an interactive fashion and it is too early to provide a definitive evaluation of their impact. Some preliminary evidence is available, however.

One result that is particularly compelling is that the cost of workers' compensation insurance fell sharply between 1978, when Michigan costs were 33 percent above the U.S. average, and 1984, when costs were 6 percent below the U.S. average (table 3.18). Burton, Hunt, and Krueger (1985, p. 135) attempted to disentangle the sources of the reduced insurance costs between 1978 and 1984 and concluded that open competition reduced insurance rates by 30.2 percent and the 1983-84 benefit changes resulting from the statutory changes in the preceding years reduced rates an additional 6.2 percent. There were other developments, such as higher medical benefits, that partially offset the impact of open competition and the 1983-84 benefit changes. In combination, all these factors produced a cumulative reduction of 31.8 percent in insurance rates between 1978 and 1984. The estimated savings to Michigan employers in 1983 and 1984 from open competition and the 1983-84 benefit changes were $502 million (Burton, Hunt, and Krueger 1985, p. 137).

The data from the National Council on Compensation Insurance (NCCI) analyzed in chapter 3 do not extend beyond 1982 policy year

experience, and so the impact of the recent amendments is only partially reflected. The data in table 3.6 are suggestive of the potential impact: Michigan's share of all cases that were permanent total cases dropped from 331 percent of the national average in 1978 to 130 percent in 1982. Supplemental data through 1983 injuries were provided by the NCCI and analyzed by Burton and Partridge (1985, p. 46), who found that permanent partial cases as a percentage of all claims had dropped about 20-30 percent in 1982-83 compared to 1979-81.

The supplemental NCCI data also indicate that other facets of the Michigan program are changing subsequent to the 1980-81 amendments. The percentage of permanent partial cases closed by lump sums was almost halved from 1979-81 to 1982-83,[7] and the percentage of all permanent partial claims accounted for by workers 50 years or older was also down about 15 percent between the two periods (Burton and Partridge 1985, pp. 48-49).[8]

Changes in workers' compensation criteria and procedures for permanent disability benefits inevitably take time to have their full impact on the program, especially when, as in Michigan, court interpretations of key provisions are needed. To be sure, as St. Antoine concluded (1984, p. 19), the preliminary data are consistent with the view that the 1980 and 1981 amendments are having significant effects on several aspects of the program. We believe the salutary effects include a reduction in the use of redemption settlements and in the use of the program by retirees, which move Michigan closer to a "true" wage-loss approach. We can easily draw up a list of further changes that would hasten the convergence of practice and theory of wage-loss in Michigan. But given the magnitude of the recent amendments, we are persuaded by St. Antoine's "one fundamental conclusion: It is entirely too soon to seek further major amendments affecting the substantive rights of employers or employees" (1984, p. 21).

New York

Administrative Structure and Procedure

Administrative Structure. The New York workers' compensation law is administered by the Workers' Compensation Board, headed by a chairman and consisting of 13 members. The members are appointed by the governor for seven-year terms. The chairman is the administrative head of the agency that processes claims and also the chairman of the Appeals Board.

One of the principal divisions under the chairman's authority is the Operations Division. Under the Operations Division are several units including the Claims Bureau, the Judges Bureau, the Review Bureau, the Medical Bureau, the Disability Benefits Bureau, the Health Provider Practices Bureau, and the Rehabilitation Bureau. Altogether, the Board has a staff of 1,627, which is the highest in terms of absolute members and, among states without exclusive state funds, the highest per million covered workers of the jurisdictions we are intensively examining (table 4.1).

The Claims Bureau processes and monitors the claims for workers' compensation: at the appropriate stage, the Bureau schedules the cases for hearings before the administrative law judges.

There are 28 hearing rooms, or parts, in New York City and an equal number of workers' compensation law judges staffing these parts, under direction of a supervisor. The six district offices outside of New York City have their own law judges, who conduct hearings at about 70 designated hearings points throughout their respective districts. Each district office has a small staff whose primary responsibility is to set up the calendar for the hearings in that district. They also have their own claims examiners, medical examiners, rehabilitation counselors, and statistical clerks.

The Board is authorized to hear cases on review in panels of three, which are formed on a rotating basis. Unlike the law judges, the Board panels hold their hearings only in the seven district offices.

The Office of the General Counsel occupies a strategic place in the work of the Board. It enforces the insurance provisions of the act, including supervision of all cancellations and renewals; it administers the Uninsured Employers' Fund and obtains and collects judgments from defaulting employers. It drafts legislative proposals and helps to steer them through the legislature, following clearance with the governor's office. It has the responsibility of assuring that the law judge and Board decisions are in conformity with the law; of preparing digests of the law and its amendments, and of Board decisions and administrative rulings; and of answering inquiries about the act and conducting investigations.

The Review Bureau has the responsibility to get cases ready for Board review, when an appeal has been filed from a law judge's decision. This involves screening cases for reviewability, digesting and summariz-

ing the facts and issues in the cases, and preparing the Board panel members for the review. This may include preparation of a memorandum for the Board members that analyzes the significant points in the case, the evidence on both sides, and the summarizer's opinion on the case.

The Basic Procedure: Indexing and Hearings. All work-related injuries and diseases resulting in a loss of time beyond the working day or shift on which the accident occurred that require medical treatment beyond ordinary first aid must be reported to the Workers' Compensation Board, which reviews the reports and indexes all cases appearing to involve more than seven days' lost time or the likelihood of permanent disability. All cases that have been indexed can be closed only after a hearing before a law judge. The claims examiner with responsibility for monitoring a case that has been indexed must schedule a case for hearing at some appropriate time, depending on the seriousness of the injury, controversion of the case, termination or reduction of benefits, or other factors. This mandatory hearing is unique to the New York workers' compensation program, and helps explain the size of the staff.

The Motion Calendar. When the examiner determines that no award of scheduled or other permanent disability benefits will be made or required, the case may be set for the "motion calendar." The parties are notified of the hearing but are not necessarily expected to appear. A law judge conducts the hearings on the motion calendar and automatically closes a case unless the claimant requests a regular hearing. If no parties appear, the case may be closed without a substantive review.

The motion calendar provides a procedure to permit the case to be closed by a law judge in fulfillment of the statutory requirement; it also allows a claimant to request a regular hearing when his claim has been set for the motion calendar. Only 18 percent of all cases closed are actually processed on the motion calendar (New York Temporary Commission 1986, p. 63). Efforts are being made to have more claims processed on the motion calendar, in order to enable the law judges to devote more of their time to the more difficult cases.

The Trial Calendar. The trial calendar includes cases requiring an immediate hearing either because the case is being controverted or because benefits have been terminated by the carrier; such cases are put on a "preference calendar" and usually set for hearing within six weeks. More routine cases, such as those in which all bills and benefits have been paid but which involve some permanent impairment, are set

for a hearing usually six months or one year after the date of injury, depending on the severity of the injury.

When a case is called at a regular hearing, the law judge checks to see that all necessary information required for the case is in the case folder and that all the participants who should be present are actually available. If all is not ready, the case may be adjourned, with notices being sent to the parties to tell them what they should do before the next hearing.

An important part of the procedure in permanent disability cases is an examination by a board doctor for a Final Adjustment. At this time the claimant is given a finding of disability.

The judge develops the record by having the witnesses for both sides testify. After all evidence is submitted by both sides, the judge usually makes an award or states his decision immediately. Notice of the decision is sent to all parties by the Board, since the decisions of the judges are considered official actions of the Board.

If a particular case is not yet ready for a Final Adjustment (for example, if the claimant is still temporarily disabled), the judge may make a temporary reduced earnings (TRE) award, if appropriate, and abey the case for another few months. The abeyance will continue until the case is ready for final adjustment.

Board Action on Lump-Sum Adjustments. A decision to close a case by making a "lump-sum adjustment" must be made by a member of the Board (prior to October 1984, approval of a three-member panel was required). The Review Bureau has a special unit called the Lump-Sum Unit that reviews applications for lump-sum adjustments. After reviewing the case, an examiner in this unit may make a recommendation and pass the case on to the Board office that schedules Board hearings.

Reopenings. Generally, reopening a case that has once been closed requires evidence of a change in the medical condition of the claimant. A case can be opened only upon the signature of a Board member. Then the case is scheduled for hearing before a law judge, under generally the same procedure as for a new case.

Upon reopening a case, the Board may make such modifications or changes in its previous findings or awards as it considers to be in the interest of justice. The modifications may be made on a change in con-

dition or proof of an erroneous wage rate, or on a showing of a mistake in facts, errors of law, or newly discovered evidence.

The provisions relating to reopening of cases and continuing jurisdiction of the Board are given a broad, liberal interpretation. This relative liberality, as compared with most other United States jurisdictions, is made possible by the presence of a Special Fund for Reopened Cases which relieves carriers and self-insurers of liability in certain "stale" cases. To be reopened under this section, the claim must have been originally closed on its merits, but there does not necessarily have to be a change in condition. Even the "reopened case fund" is relieved of possible liability after a lapse of 18 years from the date of the original injury and eight years since the last payment of compensation for the injury. When a claim is disallowed after a hearing on the merits, or the case is closed without award (after notice and opportunity to be heard), the carrier is relieved of all liability after a lapse of seven years from the date of injury or death, but the claimant may still be compensated from the reopened case fund if the claim is filed within the time limitations mentioned above.

A defender of the fund for reopened cases, to protect the fund from unwarranted claims, is appointed by the chairman of the Board, who has to approve payments out of the fund.

Appeals to the Board. Any party to a hearing may appeal a decision or award of a law judge by making written application to the Board within 30 days after the notice of decision or award has been filed. Administrative review of the decision is made by a three-member panel of the Board. The panel has the authority to weigh the evidence in the record of the case and make its determination based on the facts as well as the law. If the panel deems it necessary, it may send the case back to the law judge for further development, that is, for the purpose of getting more testimony. Panel decisions may be appealed to the full Board, which must hear the case if one panel member has dissented.

Appeals to the Courts. From the Board a further appeal may be made within 30 days to the Appellate Division of the Supreme Court, third department. An appeal to the courts from a Board decision can be made only on questions of law, not on questions of fact. The final step in the appellate process is an appeal to the Court of Appeals, within 30 days of the decision of the appellate division.

During the time the case is on appeal to the courts, any benefits awarded by the Board must be paid to the claimant. If the award is reversed, the claimant does not need to return the money he or she may have received up to that time; instead, the carrier is reimbursed from the Board's budget.

Representation at Hearings. Either party to a claim before a workers' compensation law judge or before the Board may be represented by an attorney admitted to practice in the state or by a layman licensed by the Board. (Carriers or self-insurers may be represented by their own regular employees even though they are not licensed.)

According to statistics on compensated cases closed in 1982,[9] only 19 percent of the cases involved legal fees, and the average fee was $445. The total amount of legal fees ($10.5 million) amounted to 3.0 percent of the total compensation awarded in the cases where the claimant had legal representation, or 2.0 percent of compensation awarded in all cases. The legal fee allowed "generally varies inversely with the amount of compensation. For the 3,455 cases in which the compensation award was under $1,000, legal fees amounted to 12 percent of the awards, but for the 5,917 cases in which the award was $10,000 or over, legal fees amounted to only 2 percent of the awards."

The Relationship between Temporary Total Disability Benefits and Scheduled Permanent Partial Awards

If the injury is a scheduled one, the doctor at the hearing will state a specified percentage of partial loss. The percentage rating is used in conjunction with the statutory schedule to determine the nominal duration of the permanent partial disability benefits. Thus a 100 percent loss of a leg results in a nominal duration of 288 weeks; a 50 percent loss of a leg produces a nominal duration of 144 weeks, etc. In New York, the period of temporary total benefits is deducted from the nominal duration of the scheduled award, subject to certain limits on the deduction as determined by the prescribed healing periods. These limits, as provided in the statute, range from a low of eight weeks for the loss of a toe (other than the great toe) or for the loss of the third or fourth finger, to a high of 40 weeks for the loss of a leg (Sec. 15, subd. 4-a).

If a worker lost a leg and was out on temporary total benefits for exactly the 40 weeks prescribed in the healing period, he would be paid for 40 weeks at the temporary total rate, which was a maximum of $300 a week in 1986. That 40 weeks would be deducted from the 288 weeks

of benefits allowed by the schedule, and the worker would receive 248 weeks at the permanent partial rate, which was a maximum of $150 a week in 1986. If, however, the worker were out for 48 weeks, the additional eight weeks of "protracted temporary total" would not be subtracted from the scheduled award. The worker would receive 48 weeks of temporary total benefits and 248 weeks (288–40) of permanent partial benefits.

When the number of weeks the worker is out on temporary total (or the specified healing period, if that is less than the actual period of temporary disability) is greater than the scheduled award, he receives no permanent partial benefits. (This is known as disability exceeds schedule, or DES.) For example, a worker with a 30 week healing period and a nominal scheduled award of 28.8 weeks for the loss of 10 percent of the leg will actually receive no permanent partial benefits. Of 30,118 scheduled permanent partial cases closed in 1983, there were 1,694 DES cases in which the injured worker received no permanent disability benefits.[10]

New York's method of relating temporary total disability benefits to permanent partial scheduled benefits is unique among U.S. jurisdictions (Burton, Larson, and Moran 1980, p. 258). One purported advantage is that the provision provides an incentive to return to work as soon as possible, since each extra week of healing period benefits reduces the scheduled award by a week. The incentive argument is undermined, however, since the temporary total weekly benefit rate is higher than the permanent partial rate, and consequently the worker receives more benefits in total with an additional week off work. The incentive argument does nonetheless have some merit when the New York provision is compared with the approach used in most jurisdictions, where a worker who extends the duration of his healing period by one week receives an additional week of temporary total benefits and no reduction in his permanent partial award.

One disadvantage of the approach is the confusing relationship between temporary disability benefits and scheduled awards. The statute provides in Sec. 15, subd. 4-a:

> In any case resulting in loss or partial loss of use of arm, leg, hand, foot, ear, eye, thumb, finger or toe, where the temporary total disability does not extend beyond the periods above mentioned for such injury, compensation shall be limited to the schedule contained in subdivision three.

It seems unlikely that a worker would understand this language to mean that the longer the period of temporary total disability benefits, the smaller the scheduled award. Even if this provision were clarified and workers were fully appraised of its impact, there would remain other disadvantages. One is that the provision has administrative complexities. Workers with temporary partial disability benefits must have these benefits translated into an equivalent duration of temporary total benefits in order to determine how many weeks to subtract from the scheduled award, and this multistep process invites errors and confusion.

The most compelling argument against the healing period provision is the effect of the provision on workers with extended and brief healing periods. Workers with the longest healing periods experience the most drastic reductions in their permanent disability benefits, which makes sense only if it is assumed that the workers generally have control over the duration of their healing periods.

The Relative Importance of Scheduled and Nonscheduled Awards

In 1982, 121,028 cases were closed with $526 million in cash benefits. Over 40 percent of these were permanent partial disability cases. Of these permanent partial disability cases, 89.6 percent (or 36.4 percent of all cases) were scheduled cases, but the 10.4 percent of the permanent partial disability cases (or 4.2 percent of all cases) that were nonscheduled accounted for 52.4 percent of all compensation awarded.[11] Thus by far most cases in the permanent partial disability category are decided on a scheduled rather than on a nonscheduled basis, and the nonscheduled cases are obviously much more expensive.

The numerical dominance in New York of scheduled permanent partial cases compared to nonscheduled cases is due in large part to the expansive nature of the schedule. The New York schedule applies to partial as well as total losses of the body members included in the schedule, not just to total losses as in Michigan and Pennsylvania. Also, unlike the schedules in the other two states, the New York schedules apply to losses of use as well as physical losses of the scheduled members. Only if the injury cannot be scheduled does it fall under Sec. 15, subd. 3-(w), the so-called "other cases" category, which deals with nonscheduled permanent partial cases and involves consideration of wage loss. These nonscheduled cases typically involve injuries to the back or other parts of the trunk.

Nonscheduled Benefits: the Legal Requirements

Benefits for nonscheduled permanent partial disabilities in New York State are 66 2/3 percent of the difference between the wages earned before the injury and the wages the worker is earning, or is able to earn, after the injury. The benefits are subject to a maximum of $150 a week and a minimum of $30 a week (or actual wages, if less). Most state laws limit the total amount of the award or the number of weeks of payment for nonscheduled benefits. New York's law is one of the few that provide for the payment of such benefits for the full period of disability; however, the Board has the authority to modify the degree of disability upon a showing of change in condition or earning capacity.

The statutory criteria for nonscheduled permanent partial benefits warrant elaboration. The law bases benefits on the difference between the claimant's average weekly wages before the injury and the "wage-earning *capacity* thereafter in the same employment *or otherwise*, payable during the continuance of such partial disability, but subject to reconsideration of the degree of such impairment by the board" (Sec. 15, subd. 3-[w]; emphasis supplied). The statute also provides that the wage-earning capacity of the claimant in such cases shall be determined by his actual earnings, if any. If, however, the employee has no actual earnings, the Board has the authority to fix the wage-earning capacity "having due regard to the nature of his injury and his physical impairment." The capacity cannot be determined to be in excess of 75 percent of the worker's preinjury earnings (Sec. 15, subd. 5-a).

Application of these statutory criteria results in three types of nonscheduled permanent partial disability cases: cases in which benefits are paid because of continuing wage loss; nonscheduled lump-sum adjustments, which can be approved by the Board in cases where continuance of disability and of future earning capacity cannot be made with reasonable certainty; and cases in which there is no present loss of earnings and payments consequently may never begin or may be discontinued (upon notice to the Board and a hearing).

Continuing Compensation Payments (CCP) Cases. In order for a worker to receive nonscheduled benefits, there must be affirmative answers to three questions. First, are the worker's actual earnings in the period after the medical condition is stabilized less than the worker's earnings before the date of injury? If the answer is no, then no benefits can be paid. In short, unlike in the case of scheduled awards, there can be no compensation for nonscheduled awards in New York except upon

a showing of actual wage loss. Second, if there is a wage loss, can this be attributed at least in part to the permanent consequences of the work-related injury? If the answer is no, then no benefits can be paid. If the answer is yes, then normally the nonscheduled benefits are a specified portion (66 2/3 percent) of the actual wage loss. If the worker has no actual earnings in the period after the medical condition is stabilized, however, a third question must be asked, namely, does the worker have any wage-earning capacity? If the answer is no, the worker qualifies for permanent total, not permanent partial, disability benefits. If the answer is yes, then the nonscheduled benefits are a specified portion of the difference between the worker's preinjury wages and the postinjury earning capacity determined by the Board. The second and third questions deserve further elaboration.

Second, can the wage loss be attributed to the injury? In some situations, there is a question as to whether the claimant's reduction of earnings is attributable to a compensable injury or to other factors, such as economic conditions or voluntary withdrawal from the labor force.

(1) Retirement. In a number of cases, claimants have gone into retirement after beginning to receive permanent disability benefits. In *Yamonaco v. Union Carbide Corp.*, 42 A.D. 2d 1014, 348 N.Y.S. 2d 196 (1973), and other cases the court has outlined the standards to be used: if reduced earnings are due solely to voluntary withdrawal from the labor market, old age, economic conditions, or other factors unconnected with the disability, no compensation is payable. If there is substantial proof that the claimant's disability is at least a contributing factor to the reduced earnings, however, an award is warranted.

In *Mazziotto v. Brookfield Construction*, 40 A.D. 2d 704, 338 N.Y.S. 2d 1001 (1972), the claimant received benefits for three separate accidents. He went into retirement as a result of a union rule regarding work over age 65. The Appellate Division overruled the Board and denied benefits because the claimant failed to show efforts to seek work.

In *Hyars v. Wells Fuel Oil Co.*, 46 A.D. 2d 704, 360 N.Y.S. 2d 94 (1974), the claimant elected retirement but was awarded benefits based upon a showing that he was limited to light, sedentary work as a result of a nonscheduled injury. Evidence that a claimant had sought and received part-time employment was sufficient to sustain a claim in another retirement case: *Mulpagano v. Crucible Steel*, 53 A.D. 2d 930, 385 N.Y.S. 2d 193 (1976). In *Hartman v. W. H. Dunne Company*, 50 A.D. 2d 643, 374 N.Y.S. 2d 166 (1975), the claimant had

sustained a compensable back injury in 1948, and had received benefits until 1972. After her retirement in 1973, the claimant attempted to find work but was unsuccessful. Thereupon the Board made an award, which the Appellate Division upheld.

(2) Return to School. The Yamonaco standard of voluntary withdrawal also applies here. In *Larke v. Bell Aerosystems*, 50 A.D. 2d 649, 374 N.Y.S. 2d 455 (1975), the claimant sustained a compensable back injury, looked for employment, and then returned to school full-time. With one justice dissenting, the court affirmed the Board's decision in finding that reduced earnings were due in part to disc protrusion. Similarly, in *Dooley v. NYS Bronx Children's Hospital*, 56 A.D. 2d 680, 391 N.Y.S. 2d 526 (1977), inability to perform prior duties as a registered nurse and subsequent enrollment in school as a full-time student were found not to constitute voluntary retirement.

(3) Rehabilitation and the effect of economic conditions. What if a claimant is trained for a new occupation under a rehabilitation program and then laid off? In *Boyle v. G. J. Gatti*, 40 A.D. 2d 1063, 339 N.Y.S. 2d 65 (1972), the claimant suffered a compensable permanent partial disability back injury as a mason in 1960. He received rehabilitation as an engineering administrator, and was laid off in 1970. Here the court would only allow the claim if it could be shown that the back injury was a limiting factor in the claimant's search for employment. The matter was remitted to the Board. Similarly, in *Topf v. American Character Doll and Toy Co.*, 62 A.D. 2d 1111, 404 N.Y.S. 2d 451 (1976), the claimant sustained an injury in 1961, was rehabilitated as an accountant, and was laid off in 1974. Here the court found that economic conditions were the sole cause of the layoff and denied benefits.

(4) Other factors. In another case involving a change of occupation, a telephone installer suffered a compensable back injury and took a desk job. Three years later, his earnings were reduced as a result of a strike, and the Board made an award. The court regarded as "speculative" the Board's finding that the disability was a limiting factor for employment purposes, and reversed the Board's ruling. (*Colietti v. New York Telephone Company*, 48 A.D. 2d 491, 370 N.Y.S. 2d 212 [1975].)

Finally, one need not retire or return to school to be able to collect benefits. In *Miller v. Pan American World Airways*, 46 A.D. 2d 718, 360 N.Y.S. 2d 293 (1974), the claimant, a stewardess, sustained a permanent partial disability and subsequently married and had children. On appeal by the employer, the Appellate Division found that the wage

loss was not solely related to factors other than the disability, and affirmed the award.

These various cases suggest that the general answer to the second question is: so long as the permanent consequences of the work-related injury are at least a partial cause of the wage loss, nonscheduled benefits can be paid. When, however, there are no earnings after the medical condition has stabilized, then the third question must be asked.

The third question is: does the worker have any wage-earning capacity? If so, then benefits are based on the difference between preinjury actual earnings and postinjury earning capacity. For example, if a worker earned $200 a week before he was injured and (despite his lack of actual earnings) he is considered by the Board to maintain 75 percent of his earning capacity, then his nonscheduled permanent partial benefits are $33.33 per week (66 2/3 percent of $50.00).

Determining the earning capacity of a worker with no actual earnings is a formidable challenge. A tremendous share of the responsibility falls on the Board's doctors, who conduct the examination at the time of the final adjustment. They usually limit their evaluations of disability in the nonscheduled cases to mild, moderate, or marked (basically equivalent to 25, 50 or 75 percent of total disability, respectively). The doctor makes his report on a Form C-210 and may be called to testify on his report if either party requests it. That medical report is then considered by a law judge, who determines the extent of loss of earning capacity. The ultimate responsibility for determining the extent of disability rests with the judge rather than the doctor, subject, of course, to possible Board and court review. This is because the payment of benefits is contingent upon a showing that the physical impairment sustained is responsible for a reduction in wage-earning capacity, and the doctor's opinion is supposed to be directed toward medical aspects only. The statutes specifically indicate that the nature of an injury and the impairments resulting from it can be taken into account in determining the extent of loss of wage-earning capacity.

In general, the Board appears to defer to medical findings in determining the extent of earning capacity, and in turn the courts generally defer to the determinations made by the Board. For example, in *Smith v. GAF Corporation*, 44 A.D. 2d 864, 355 N.Y.S. 2d 484 (1974), the Appellate Division affirmed a Workers' Compensation Board finding of a 25 percent nonscheduled, permanent partial disability, which was based on an orthopedist's testimony that the claimant could only per-

form light work. "The sole question presented in this appeal is whether there was substantial evidence to support the board's determination, and we find that there was." The test is whether the Board has "substantial evidence to support its determination." *Sansome v. Maislin Transport Ltd.*, 72 A.D. 2d 644, 421 N.Y.S. 2d 137 (1979). When the evidence is not deemed to be sufficient, the court can remand the matter for further evidence.

Another case shows the extent of deference to medical testimony by the Board and the courts. In *Walsh v. New York Telephone*, 55 A.D. 2d 765, 389 N.Y.S. 2d 463 (1976), the claimant sustained nonscheduled injuries to her back and leg as a result of a fall. The Board in this case based its award on the testimony of a neurological specialist, who accepted the claimant's description of her continuing pain. The Appellate Division affirmed.

On the other hand, the court does not always affirm the Board. In *Grossman v. Posture Line Shops, Inc. et al.*, 28 A.D. 2d 1149, 284 N.Y.S. 2d 242 (1967), the court reversed, stating that "[T]here is lacking any qualified opinion testimony as to the exact cause of the claimant's neurological condition . . . The board's determination . . . is unsupported by substantial evidence."

Nonscheduled Adjustments (Lump-Sum Settlements). Nonscheduled adjustments through the payment of a lump sum may be approved by a Board member upon a showing that several conditions have been met. Some of these conditions are statutory and some are the result of rules or practice.

Lump-sum settlements, or nonscheduled adjustments, in New York State cannot be easily compared to the so-called "compromise and release agreements," which form a substantial part of the claims-closing process in many other states. One difference is that in the other states permitting redemption of the employer's liability by a compromise, the agreement may involve not only extent of disability but other matters, such as the issue of compensability itself. Under the New York provision adjustments are permitted only if both the carrier and employee agree to a settlement, and then only under certain carefully defined conditions. At least three conditions must be met before a lump-sum adjustment is allowed: the right to compensation has been established and compensation has been paid for at least 13 weeks, the case involves a nonscheduled permanent partial disability, and the continuance of disability and of future earning capacity is uncertain. In addition, there

must be no outstanding payments or bills for either cash benefits or medical treatment; the general rule is that there must have been no medical treatment required within the past three months. Other rules of thumb concern the claimant's working status, his purpose in wishing to settle the case, and his psychological condition. Generally there is a medical report indicating that the settlement would be of "therapeutic" value to the claimant, presumably because he would no longer worry about the case and would be encouraged to return to gainful employment. The Board normally will not approve a settlement for a claimant who is not working unless he has voluntarily withdrawn himself from the labor market.

Another thing that distinguishes the New York lump-sum adjustment system is that the claimant has the opportunity to later reopen the case upon a showing of change in medical condition. For this reason the procedure is not as appealing to carriers or employers as are compromise and release agreements, which operate as an absolute release of the claimant's right to further benefits.

No Present Loss of Earnings. As indicated previously, no compensation is payable for nonscheduled permanent partial disability unless actual wage loss can be shown. The injured worker will of course receive necessary medical treatment and payment of cash benefits for temporary total or temporary partial disability. If the medical evidence shows that there is a permanent residual impairment even in the absence of wage loss, the judge will indicate a classification of "permanent partial disability" with no present loss of earnings, and close the case without prejudice; it can later be reopened if the claimant's condition or status changes.

The Relative Importance of the Three Types of Nonscheduled Awards

Although data on the prevalence of the three types of nonscheduled awards are not routinely published by the Workers' Compensation Board, information on several years is presented in table 8.1. In 1970, cases with continuing compensation payments (CCP) and cases with lump-sum payments each accounted for about 44 percent of nonscheduled awards, while nonscheduled cases closed without permanent disability benefits because of no present loss of earnings accounted for about 12 percent of nonscheduled awards. By 1982, the CCP cases dominated, accounting for 60 percent of all cases, while lump-sum awards were made in 31 percent of the cases, and cases closed without nonschedul-

Table 8.1
Numbers of Cases and Costs of Compensation for Three Types of Nonscheduled Permanent Partial Disability Cases, as a Percentage of All Nonscheduled Permanent Partial Disability Cases, Selected Years, 1970–82

Year	Lump sum		No present loss of earnings		Payments to continue	
	Number of cases	Amount of compensation	Number of cases	Amount of compensation	Number of cases	Amount of compensation
1970	44.9	25.0	11.8	2.4	43.4	72.6
1973	35.4	19.4	13.7	2.6	50.9	78.0
1977	26.1	12.8	8.5	1.3	65.4	85.9
1980	28.9	14.9	8.3	1.2	62.8	83.9
1982	31.3	17.4	8.6	1.4	60.1	81.2

SOURCE: Special tabulation provided by Research and Statistical Department, State of New York Workers' Compensation Board.

ed benefits because of no present loss of earnings accounted for about 9 percent of the cases. The predominant place that the payments-to-continue awards had achieved by 1982 is even more strikingly shown in the table by a breakdown of the amount of compensation awarded by the three categories of award.

The data showing that cases closed with payments to continue are the dominant type of nonscheduled permanent partial disability case must be used with caution. In a recent study of cases involving 1972 injuries that resulted in nonscheduled permanent partial disability benefits, Burton, Partridge, and Thomason (1986, pp. 65-66) found that 29.7 percent were originally closed with lump-sum settlements (a statistic comparable to the figures in table 8.1); however, many cases originally closed with no present loss of earnings or with payment to continue were reopened and reclosed with lump-sum settlements, so 51.1 percent of the 1972 injury cases had been ultimately resolved with lump-sum settlements by 1983. Unfortunately, comparable data for other years are unavailable, but the results strongly suggest that the use of lump sums to terminate eligibility for the New York wage-loss benefits is much more prevalent than data published by the Board suggest.

Major Member Continuing Disability Benefits

New York, in 1970, added Sec. 15, subd. 3-(v), calling for additional payments beyond the period specified in the schedule in a case where there is 50 percent or more loss or loss of use of certain major members (arm, leg, hand, or foot) and where there is actual wage loss at the end of the scheduled period of benefits, provided the impairment of earning capacity is due solely to such physical loss and provided the worker participates in a Board-approved rehabilitation program. The injured worker must make application for such continuing disability payments and the benefits are subject to an offset of 50 percent of social security disability benefits.

There are relatively few cases involving 50 percent or more loss or loss of use of a major member. Of 30,118 cases involving scheduled injuries that were closed in 1983, only 227 (or 0.75 percent) met the criteria for Sec. 15(3)(v) benefits.[12] Moreover, a special analysis of claims involving such loss resulting from injuries occurring in 1972 showed that, at least partly owing to the restrictions written into the law, very few 50 percent major member losses have actually qualified for continuing disability benefits under this provision (Burton, Larson, and Moran 1980, pp. 139-40 and chapter 11).

Permanent Total Benefits

Benefits: Weekly Amounts and Duration. Benefits for permanent total disability in New York are now payable at two-thirds of the employee's average weekly wage, subject to a maximum weekly rate of $300 and a minimum of $20, or actual wages, if less, for life or the duration of the disability. If the injured worker, though classified as permanently and totally disabled, is able to work for some wages, the compensation payable may be partially offset by the worker's actual earnings, so that compensation plus the earnings shall not exceed the wage base on which the maximum weekly benefit is computed under the law in effect at the time of such earnings. No deduction from the compensation payable takes place, however, if the permanent total disability was due to the loss or loss of use of both eyes; or both hands, arms, legs, or feet; or of any two thereof. There are two categories of permanent total disabilities: the scheduled type, covering these impairments mentioned in the previous sentence, and the non-presumptive type, which is assessed in accordance with the facts. The scheduled cases are presumed to be permanent and total "in the absence of conclusive proof to the contrary."

Experience with Permanent Disability Benefits. Permanent total disability cases have been relatively rare in New York, never accounting for as much as 0.1 percent of all cases with cash benefits during the 1958 to 1982 period (table 3.6). As of 1982, the share of all cases represented by permanent total cases was only 34 percent of the national average share for such cases (table 3.6). Nor have these cases been particularly expensive. In 1982, for example, the average permanent total case in New York involved $60,789 of cash benefits, only 66 percent of the national average figure of $92,055 (table 3.10). As a result, cash benefits for permanent total cases accounted for slightly less than 1 percent of all cash benefits in New York in 1982, about one-fourth of the national average share of costs accounted for by such cases (table 3.14).

Permanent partial disability cases are also relatively inexpensive in New York compared to other jurisdictions, although the facts concerning them are somewhat more complex. The schedule is relatively comprehensive in New York, especially in comparison with Pennsylvania and Michigan, and thus a relatively large number of permanent partial cases are compensated in New York. As of 1982, permanent partial

cases (major and minor) accounted for 27.81 percent of all New York cases, above the average of 22.05 percent for the eight states intensively examined in chapter 3 (see tables 3.7 and 3.8). Among the eight states, only in California (29.9 percent), with its comprehensive schedule, and New Jersey (45.18 percent), with its aberrant legal doctrines, did permanent partial cases represent a higher percentage of all cases than in New York.

Although permanent partial cases were relatively common in New York, their costs were relatively low as of 1982. In 1958, the average cost of major permanent partial disability cases in New York was $8,897, which was 129 percent of the national average for that year. However, by 1982, the New York average of $19,730 was only 78 percent of the national average ($25,139) (table 3.11). Similarly, the average cost in New York for minor permanent partial cases was $1,044 in 1958, or 80 percent of the national average, whereas in 1982 it was $2,619, or only 53 percent of the national average of $4,953 (table 3.12).

The total costs of permanent partial cases in New York were also relatively low. Reflecting the below average cost per case, in 1982 the major permanent partial cases accounted for 36.71 percent of all cash benefits in New York, which was only 86 percent of the average share for such cases nationally (table 3.15). Although minor permanent partial cases were relatively common in New York, because of their low average cost their total cost in 1978 was 18.26 percent of all cash benefits, only 82 percent of the national average share for minor permanent partial cases (table 3.16).

If the total costs of all types of permanent disability cases (permanent total, major permanent partial, and minor permanent partial) are considered, New York devotes a relatively low share of all cash benefits to such cases. As of 1982, 55.95 percent of all cash benefits were spent on permanent disability cases in New York; among the eight jurisdictions intensively examined in chapter 3, only Pennsylvania, with its restrictive schedule, had a lower percentage (51.64; see table 3.17). Indeed, among the 45 jurisdictions for which data are presented in table 3.5, only Arizona (49.59 percent), Indiana (55.81 percent), Missouri (50.25 percent), and Pennsylvania (51.64 percent) devoted lower percentages of their cash benefits to permanent disability benefits than did New York (55.95 percent).

The rather tranquil picture of permanent disability benefits in New York conveyed by those data may, however, be somewhat misleading

in terms of the dynamics of permanent partial disability benefits in New York. One reason is that the data in chapter 3, which are based on information from the National Council on Compensation Insurance, have a serious deficiency for purposes of analyzing the New York experience. The NCCI data separate permanent partial cases into major and minor categories depending on the seriousness of the injury. In New York, however, the more significant distinction is between scheduled and nonscheduled injuries, and unfortunately benefits for both types of injuries are included in both the major and minor permanent partial categories of the NCCI.

As discussed earlier, in New York, scheduled injuries are rated primarily on the basis of impairment and functional limitations, whereas nonscheduled injuries are rated on the basis of loss of wage-earning capacity, which is operationalized through measurement of actual wage loss. The worker must actually be out of work or earning less than his preinjury wages before he is judged to have lost wage-earning capacity.

The result is that there is a sharp distinction in New York between scheduled and nonscheduled injuries. It is not simply a matter of scheduled injuries being assessed on the basis of the number of weeks listed for a particular extremity and nonscheduled being based on the number of weeks that represents the "whole person," as in our category II states analyzed in chapter 7. It is not a difference in base, it is a difference in concept.

One data source that does distinguish between the scheduled and nonscheduled benefits in New York is the information published by the State of New York Workers' Compensation Board on compensated cases closed. In particular, there is an annual publication showing, *inter alia*, the number and costs of cases closed in the year. Table 8.2 provides data for selected years between 1960 and 1983, the most recent data available. Scheduled cases have accounted for about 35 percent of all cases throughout the period, whereas their share of all costs has declined from about 35 percent to about 25 percent. Nonscheduled cases have represented about 2.5 to 4.5 percent of all cases, whereas their share of all costs has increased from about 32 percent to over 50 percent; virtually all of the increased costs occurred during the 1970s. In short, this disaggregation of data reveals that scheduled awards have declined in importance while nonscheduled awards have grown in importance.

Of particular interest here is the rapid escalation in the numbers and costs of nonscheduled permanent partial benefits during the 1970s. Bur-

ton (1983) has examined this issue in a separate study. He made a statistical analysis of the determinants of the number and costs of workers' compensation cases in New York from 1959 to 1979, and used the results to help explain developments in the 1970s in nonscheduled permanent partial benefits. The number of nonscheduled cases per thousand employees was up 54.6 percent during the 1970s; the average cost of the cases (in constant dollars) was up 23.5 percent; the total costs (in constant dollars) of nonscheduled cases per thousand employees was up 91.0 percent. Burton found that over half of the increases during the 1970s in these three measures of nonscheduled permanent partial benefits was associated with increases in the unemployment rate. He also found that there was no statistically significant relationship between labor market conditions and the number of costs of scheduled permanent partial disability benefits in New York from 1959 to 1979. The difference between scheduled and nonscheduled benefits in their sensitivity to labor market conditions was consistent with Burton's expectations for New York, since the scheduled benefits are paid regardless of wage loss, while a precondition for the nonscheduled benefits is actual losses of earnings. In a labor market as slack as New York's in the 1970s, when the unemployment rate almost doubled (from 2.5 to 4.9 percent), it is reasonable to expect that more injured workers with nonscheduled injuries will experience actual wage loss and thus qualify for benefits.

Table 8.2
Number of Cases and Cost of Compensation for Scheduled and Nonscheduled Permanent Partial Disability, as a Percentage of All Cases, Selected Years, 1960–83

	Scheduled awards		Nonscheduled awards	
Year	Number of cases	Amount of compensation	Number of cases	Amount of compensation
1960	34.1	35.0	3.0	32.2
1965	38.9	34.8	2.6	34.8
1970	37.9	35.7	2.6	34.5
1975	37.3	30.0	3.1	44.7
1980	35.6	24.0	3.8	50.9
1983	34.8	23.0	4.4	52.1

SOURCE: *Compensated Cases Closed*, Workers' Compensation Board, State of New York, for years shown. The figures for 1983 are preliminary.

In light of the rapidly increasing costs of nonscheduled benefits during the 1970s, it is somewhat surprising that the overall costs of workers' compensation did not increase particularly fast in New York in that decade. In 1972, insurance premiums for workers' compensation represented 0.864 percent of payroll in New York, which was 10.3 percent above the average figure of 0.783 percent in the 28 jurisdictions (table 3.18). By 1978, New York employers were expending 1.770 percent of payroll on workers' compensation, which was 24.6 percent above the U.S. average of 1.420 percent. Thus over the 1972 to 1978 period for which data are available, New York's costs increased only somewhat more rapidly than costs elsewhere, despite the escalating cost of the nonscheduled permanent partial disability benefits. Moreover, by 1984 insurance rates in New York had been sharply reduced, and New York employers were spending about 21 percent less on workers' compensation than were employers elsewhere, on average (table 3.18).

Several factors help explain these favorable insurance cost developments in New York during a period when the costs of nonscheduled permanent partial cases rapidly escalated. One is the relatively slow pace of benefit increases. In 1972, for example, the maximum weekly benefit for temporary total disability benefits was $95.00 in New York, which was 63 percent of the state's average weekly wage, and New York ranked well above the median for the 52 jurisdictions for which data are available. By January 1986, the maximum was $300.00, which represented 80 percent of the state's average weekly wage. However, as of that date, 32 of 52 jurisdictions had maximums for temporary total disability that were at least 100 percent of the state's average weekly wage, and only 16 jurisdictions had maximums that were lower relative to their average weekly wages than the 80 percent figure for New York (U.S. Dept. of Labor, State Compliance, 1987).

Permanent partial disability benefits have also declined relatively in New York during the last decade. As of 1972, the maximum for permanent partial was $80.00 per week, which was 53 percent of the state's average weekly wage. The maximum in January 1986 was $150.00, which represented only 40 percent of the state's average weekly wage. The relatively slow increase in maximum weekly benefits helps explain how overall workers' compensation costs in New York have increased rather slowly despite the surge in nonscheduled benefits (Burton and Krueger 1986).

New York is not usually thought of as a wage-loss state, and yet with the exception that preinjury earnings are not escalated through time as a basis for calculating wage loss, the New York nonscheduled benefits are probably the most pristine version of a "pure" wage-loss approach found in the country. The reason is that the New York wage-loss benefits, unlike those of Pennsylvania and Florida, for example, can be paid for as long as wage loss continues. Compromise and release agreements and other devices to limit the potential duration of wage-loss benefits are a threat to the wage-loss approach in New York, however, although the problem is not as severe as in Michigan.

The reason that New York wage-loss benefits are less conspicuous than those of the other jurisdictions is that the New York schedule encompasses a high proportion of all injuries with permanent consequences, leaving only a relatively few nonscheduled cases. Approximately 90 percent of permanent partial cases are rated on the basis of the schedule, leaving only 10 percent to be compensated on the nonscheduled wage-loss basis. In contrast, the scope of injuries covered by the Pennsylvania schedule is quite limited, leaving most cases to be handled by the wage-loss approach, and the 1979 Florida statute makes wage-loss benefits potentially available to all workers with permanent disabilities (including those workers who also receive scheduled or 'impairment' benefits). In Michigan, the schedule is used extensively, but workers who suffer continuing wage loss may qualify for wage-loss benefits as well as scheduled awards.

The wage-loss benefits in New York, although inconspicuous, provide valuable lessons. They demonstrate that wage-loss benefits can be expensive, particularly in a slack labor market. The legal decisions from New York also provide valuable guidance on issues that are inherent in a wage-loss approach, as will be evident in the next chapter when we review the legal controversies concerning the Florida wage-loss provision.

The Temporary State Commission

An extensive examination of the New York workers' compensation program was completed in 1986 by the Temporary State Commission on Workers' Compensation and Disability Benefits. Although the Final Report considered a variety of topics, ranging from rehabilitation to third-party suits for employer contribution, considerable attention was devoted to "eleven issues relating to the adequacy and equity of disability benefits" (New York Temporary Commission 1986, p. 29).

One issue concerned the statutory maximum for partial disability, which at $150 per week is only half of the maximum for total disability; the Commission recommended that the maximum for partial disability should be increased so that in no more than three years there would be a single maximum for total and partial disability. Another issue involved the subtraction of temporary total benefits from the scheduled awards, which the Commission would eliminate. Lump-sum settlements were examined, and the Commission (at p. 46) raised the "troublesome possibility that lump sums in some, and perhaps many, cases are the product of desperation" by claimants. The Commmission (at pp. 165-66) "concluded that additional limitations and safeguards on lump sum settlements are warranted," such as prohibitions on any lump-sum settlement that impairs the claimant's right to medical benefits.

The most fundamental reform proposed by the Temporary Commission would eliminate the current provisions for permanent total, scheduled permanent partial, and nonscheduled permanent partial benefits. Instead, all workers with injuries that had permanent consequences would receive benefits in three stages. During a worker's healing period, the worker would receive temporary disability benefits as under the current law. When the worker reaches maximum medical improvement, he would be rated using a comprehensive rating system to evaluate the extent of impairment, such as the American Medical Association *Guides* (1984). If the worker had an impairment rating above a minimum threshold, he would receive presumed disability benefits, with the duration determined by the size of the impairment rating. The presumed disability benefits would be paid regardless of the worker's labor market experience. At the expiration of the presumed disability benefits (or six months after the date of maximum medical improvement, whichever is later) a worker with an impairment rating above a continuing disability threshold could qualify for continuing disability benefits if he were then experiencing actual wage-loss due to the work injury.

This hybrid system of benefits was unanimously endorsed in principle by all members of the broad-based Temporary Commission, although specific aspects, such as the exact benefit formula for the continuing disability benefits, were left for the legislature to decide. A bill incorporating the Commission's restructuring of permanent disability benefits is expected to be introduced in 1987. The proposed reform is consistent with our views of desirable reform, as discussed in chapter 12.

Ohio

Several types of benefits have been or are payable to Ohio workers with nonscheduled permanent partial disabilities. One type, known as permanent partial or C-92 award, relates the amount of benefits to the seriousness of the worker's permanent impairment. This choice was discussed in chapter 6, which also provided information on the structure and procedures used to provide permanent disability benefits in Ohio. Until 1986, the worker also had the choice of a form of wage-loss benefit instead of the permanent partial (C-92) award. The 1986 amendments removed the choice and made a form of wage-loss benefits a prerequisite to the granting of the C-92 award. We review first the pre-1986 optional form of wage-loss benefits and then briefly summarize the new provision.

The "Old" Wage-Loss Benefit

The alternative approach to compensating permanent partial disabilities was included in paragraph (A) of Section 4123.57:

> In case of injury or occupational disease resulting in partial disability other than [the scheduled benefits], the employee shall receive per week sixty-six and two-thirds per cent of the impairment of his earning capacity . . . during the continuance thereof. . . .

These benefits were subject to a weekly maximum of 100 percent of the state's average weekly wage and a maximum aggregate amount of $17,000. It is not immediately obvious that the paragraph (A) benefits belonged in our category III approach to nonscheduled permanent partial disability benefits, that is, the wage-loss approach. One reason is that paragraph (A) did not confine itself to permanent disability, as opposed to temporary disability. Indeed, the paragraph (A) awards were commonly referred to in Ohio as "temporary partial" awards, even though the statute contains no such terminology. Despite this usage in Ohio, we consider the paragraph (A) awards in at least some cases as benefits paid for permanent partial disabilities. As we understand the Ohio provision, workers could qualify for paragraph (A) awards even if they had reached maximum medical rehabilitation, and for these workers, the benefits could be classified as permanent partial disability benefits.

The language of paragraph (A) also seems to be inconsistent with our characterization of the approach as wage-loss, since it refers to "the impairment of his earning capacity." This sounds like our category II approach (chapter 7). Using the definition of wage-loss approach elaborated early in this chapter, however, we believe our classification of the paragraph (A) benefits is correct. Specifically, trait four indicated that in a wage-loss approach, the definition of compensable wage loss is "the lesser of: (a) the worker's potential earnings minus the worker's actual earnings; or (b) the worker's potential earnings minus the worker's earning capacity."

The application of paragraph (A), as described by Young (1971), the former administrator of the Ohio Bureau of Workmen's Compensation, appears generally to follow this definition. Potential earnings for paragraph (A) awards are calculated as "the average weekly wage for the year prior to the injury" (p. 126). No provision is made for escalation of the wages after the date of injury, which is one of the deviations from the pure wage-loss approach in Ohio. As to earning capacity, Young (1971, p. 135) indicates the term "is not defined in the statutes. It involves all of the factors relative to the ability to earn. The wages actually lost are evidence of impairment in earning capacity although such an impairment can exist without any actual loss in wages. *Industrial Commission v. Royer*, 122 Ohio St. 271, 171 NE 337 (1930)." This passage suggests that loss of earning capacity by itself will result in benefits. However, Young (at p. 136) then provides examples that clarify the use of the earning capacity measurement in Ohio.

One example involves a worker who had a $100 average weekly wage before he was injured, which by the Ohio approach means the post-injury potential earnings are $100. As a result of the injury, the worker "suffered a twenty-five percent physical disability," which means the worker retains 75 percent of his earning capacity. This means the worker's potential earnings minus the worker's earning capacity is $25. The worker does not automatically get benefits based on the loss of earning capacity, however, as he would in a category II state, because benefits are based in part on actual earnings. If the worker actually earns $70 after the injury and the wage loss is due to the injury, then the benefits under paragraph (A) are two-thirds of the actual wage loss of $30, or $20. Young then adds (p. 136) that the "twenty dollars per week . . . would be within the twenty-five dollar maximum that had been set and, therefore, payable to the employee." Clearly, in this example the benefits paid are less than the amount suggested by the loss

of earning capacity, because the compensable portion of the actual wage loss was a smaller amount.

Young also provides an example in which the potential earnings were $100 and the loss of earning capacity was 10 percent. This means the worker's potential earnings minus the worker's earning capacity is $10. If this worker then has actual earnings of $70 after the injury, two-thirds of the actual wage loss is $20, but the worker only receives a benefit of $10 since the loss of earning capacity is less than the compensable portion of the actual wage loss.

The "New" Wage-Loss Benefit

Despite the apparent lack of utilization of and enthusiasm for the optional wage-loss benefits, the 1986 legislature added a mandatory form of wage-loss benefit that replaces the former paragraph A benefits. Sec. 4123.56 (B) now provides that when an employee

> suffers a wage loss as a result of returning to employment other than his former position of employment or as a result of being unable to find employment consistent with [his] physical capabilities, he shall receive compensation at sixty-six and two-thirds [sic] of his weekly wage loss not to exceed the statewide average weekly wage for a period not to exceed two hundred weeks.

The wage-loss approach to permanent partial disability benefits found in paragraph (A) of Section 4123.57 was the only choice available to workers until 1941. At that time, according to Young (pp. 144-45), the approach was "advantageous to an injured employee" because of the adverse economic conditions. Presumably, Young means that because of the high unemployment of the era, many workers experienced actual wage loss and therefore received benefits under the provision. The paragraph (B) option was then added with the "fundamental purpose . . . to encourage injured workers to return to work." The feature of the impairment benefits under paragraph (B) that would encourage such efforts to find jobs is that the benefits "could be received even though the employee had returned to work and was earning wages." Also, under the paragraph (B) approach, the worker was relieved of the burden of periodic wage reports and periodic physical examinations.

In addition to these factors identified by Young as to why the paragraph (B) benefits might be preferred, another feature attractive to workers

was that benefits of a known amount could be received with certainty, whereas the paragraph (A) awards depended on uncertain subsequent evaluations of actual wage loss and of loss of earning capacity. For risk-averse workers, the wage-loss benefits would be unattractive because of the risk they entail, even if they have the theoretical advantage of providing a better match between lost earnings and benefits paid.

Whatever the reasons—and we may have overlooked some—paragraph (B) benefits were much more attractive to workers than were the wage-loss benefits under paragraph (A). Young reports (p. 145) that the paragraph (B) benefits accounted for 19 percent of the benefits paid by the State Insurance Fund, compared to only 3 percent for the paragraph (A) wage-loss benefits.

The 1986 amendments also provide that the permanent partial (C-92) award or scheduled permanent partial benefits cannot be paid until at least 40 weeks after the termination of temporary total disability or wage-loss benefits under Sec. 4123.56 (B). This obviously can lead to a gap in the benefits provided to workers with permanent disabilities. The Ohio benefits scheme is also questionable because the wage-loss benefits precede the benefits based on the extent of impairment. We argue in chapter 12 that the preferable order is presumed disability benefits followed by wage-loss benefits. As experience develops under the Ohio provision, we will be able to assess the consequences of a policy that is the inverse of our best judgment of how benefits should be structured.

NOTES

1. If he returned to work at the $200 wage and if he could show an impairment as a result of his injury, he could still receive an award, but payments could be suspended until actual earnings loss occurred. *Benedict v. Fox*, 192 Pa. Super. 197, 159 A.2d 756, 758 (1960), cited by Larson (1986), Sec. 57.12.

2. National Council on Compensation Insurance, "Countrywide Workers' Compensation Experience Including Certain Competitive State Funds—1st Report Basis," Exhibit dated June 1986. On an ultimate report basis, Pennsylvania had 496 permanent total cases in 1982, the largest number of any jurisdiction. As explained in chapter 3, we concentrate on the first report data in order to provide historical comparability.

3. *Civil Service Commission v. Dept. of Labor*, 424 Mich. 571, __ N.W.2d __ (1986).

4. As cited by St. Antoine (1984, p. 23).

5. *Detroit Free Press*, 5 Jan. 1986, p. 1.

6. Although, as Hunt notes, the conclusions involving the determinants of the size of the lump-sum payments "must be regarded as somewhat tentative," the evidence does show a "positive relationship between the size of the lump-sum and previous repeated spells of disability, a record of hospitalization, or a claim of a back injury." (Hunt 1982, p. 191.) These are the kinds of factors that affect estimates of the extent of loss of earnings capacity in states that use that approach.

7. These NCCI data showing a decline in lump-sum settlements are not entirely consistent with the data presented by St. Antoine (1984, p. 58), which shows only a modest decline in redemptions as a percentage of dispositions from 63.8 percent in 1981 to 54.4 percent in the first nine months of 1984.

8. Additional data showing a decline in the percentage of claims filed by retirees are provided by St.Antoine (1984, pp. 60-62).

9. All data on 1982 legal fees are from New York Workers' Compensation Board (1984), pp. 13-13 and tables 1 and 16.

10. The 30,118 scheduled permanent partial cases closed in 1983 were analyzed by Burton and Thomason (1986), Appendix I. Not all scheduled cases closed that year were included in the study; two reasons are (1) only 1979-1982 injuries were included because maximum benefits for total and partial disability did not change in this interval, and (2) certain cases involving 1979-1982 injuries were excluded because of apparent errors on the data tape provided by the Workers' Compensation Board.

11. The data are from New York Workers' Compensation Board (1984), table 2. Board data are based on information collected at the time of initial closing of the cases, which includes estimates of the present value of future benefits for those cases in which benefits were still being paid as of the date of closing.

12. The data are from Burton and Thomason (1986), discussed supra, note 10.

13. The unemployment rate is the insured unemployment rate lagged two years for reasons explained in Burton (1983).

Chapter 9
The Transformation of Florida to a Wage-Loss State

Florida's population in 1980 was 9,747,197, the seventh largest among the states. That population had grown by more than 2.9 million during the 1970s, a figure surpassed only by California and Texas.

As the population grew in Florida during the 1970s, so did the workforce and the size of the workers' compensation program. There were about two million workers covered in 1970; by the end of the decade, the number had grown to over three million.[1] More important than the change in the size of the program was the significant change in the approach to compensating permanent partial disability benefits that resulted from legislation enacted in 1979. At that time, Florida abandoned an unusual, if not unique, approach that allowed the worker to have his nonscheduled permanent partial injury evaluated on the basis of the extent of impairment (our category I approach) or on the basis of the loss of earning capacity (our category II approach). The 1979 law, probably the most widely discussed reform in workers' compensation in the last decade, essentially dropped the distinction between scheduled and nonscheduled permanent partial injuries, and established the wage-loss approach as the primary basis for compensating permanent disabilities.

The first section examines the approach used before the 1979 reforms.[2] Such a review is important because the unique choice of criteria approach for nonscheduled benefits needs to be documented for the edification of policy makers who may some day reinvent the approach. The pre-1979 situation also needs to be examined in order to understand the forces that led to the enactment of the wage-loss approach. In addition, the pre-1979 legislation provided the benefits paid to the workers examined in the study of Florida workers reviewed in part III of this volume. Even though the Florida law has been drastically changed since 1979, its essence—the determination of the amount of permanent partial disability benefits on an *ex ante* basis—is still the approach used in most jurisdictions, and therefore an understanding of how the prior

Florida law operated provides information relevant for reform efforts nationally.

The second section will examine the nature of the 1979 reforms, together with several changes made in 1978 that are also reflected in the current statutory scheme in Florida. The third section reviews data on the experience with the wage-loss approach, and the last section provides some evaluation of the 1979 reforms.

Florida Before Wage-Loss

Statutory Criteria for Permanent Partial Disability Benefits

Before 1979, permanent partial disability was covered by paragraph (3) of Section 440.15 of the Florida Workmen's Compensation Law. The weekly amount was 60 percent of the worker's average weekly wage prior to the date of injury. For scheduled injuries, the durations specified in the statute ranged from 200 weeks for the loss of an arm to 15 weeks for the loss of the fourth finger, plus additional provisions for loss of hearing, loss of vision, and disfigurement. The schedule was typical, covering most body extremities and providing for total or partial loss and for total or partial loss of use. It was also typical in that not much guidance was provided to the parties as to how the schedule was to be applied.

The determination of the duration of nonscheduled permanent partial benefits was provided for in a relatively brief paragraph, as follows:[3]

> In all other cases in this class of disability the compensation shall be 60 percent of the injured employee's average weekly wage for such number of weeks as the injured employee's percentage of disability is of 350 weeks; provided, however, that for purposes of this paragraph "disability" means either physical impairment or diminution of wage earning capacity, whichever is greater.

The statute provided no guidance as to how physical impairment or diminution of wage-earning capacity was to be determined.

The statute in effect in Florida before 1979 thus relied on the normal distinction between scheduled and nonscheduled benefits, with the durations for both types of permanent partial disability benefits determined on an *ex ante* basis. That is, as soon as the medical condition was stable (when the date of "maximum medical improvement" was reached),

the permanent consequences of the worker's injury were evaluated and the rating was used to determine the duration of the permanent partial disability benefits.

Criteria for Nonscheduled Permanent Partial Disability Benefits[4]

The statute, as quoted above, offered the worker with a nonscheduled injury the choice of having the permanent consequences rated in terms of the physical impairment or in terms of the diminution of wage-earning capacity. In general, workers preferred to use the loss of wage-earning capacity approach because usually there were some factors pertaining to age, education, and so forth that could be relied on to increase the rating beyond that based strictly on the evaluation of the worker's physical impairment.

Neither the statute nor the Bureau of Workmen's Compensation had published guidelines or instructions for measuring diminution of wage-earning capacity. As a result, the Florida courts spelled out the factors to be considered in determining the extent of loss of earning capacity. In *Walker v. Electronic Products & Engineering Company*, 248 So. 2d 161,163 (Fla. 1971), for example, the Florida Supreme Court listed eight factors, including: inability to obtain work of a type which claimant can perform; wages actually earned after injury (a factor entitled to great weight); and "ability to compete in the open labor market the remainder of his life, including the burden of pain, or the inability to perform the required labor."

This list makes clear that actual wage loss was a factor in determining the extent of loss of earning capacity. There is, however, a crucial difference between this approach and an actual wage loss approach. In an actual wage-loss approach, if the worker earns more after the date of maximum medical improvement than before the date of injury, then the employer has no liability for permanent partial disability benefits,[5] whereas in a loss of earning capacity approach, the fact that there is no actual loss of earnings will not necessarily preclude a finding of a loss of earning capacity. Thus, in *Woodward v. Dade County Board of Public Instruction*, 278 So. 2d 620 (Fla. 1973), the court reinstated the order of the Judge of Industrial Claims for an award of 20 percent of loss of earning capacity even though the worker had returned to the same employer and was earning the same wages as before the injury. In this case, the physical impairment had been rated at only 5 percent of the whole man, and the worker's other characteristics had been used to justify the 20 percent loss of earning capacity judgment.

The *Woodward* case is a good illustration of how workers with nonscheduled injuries often benefited from having their cases rated on the basis of diminution of wage-earning capacity rather than on the extent of physical impairment. There were, however, a few obstacles to the use of loss of earning capacity as a basis for compensation:[6] the claimant had to make a good faith job search,[7] and determination of loss of earning capacity was constrained by several requirements (the loss of earning capacity rating had to be based on facts existing at the time of the award, not on predictions about the claimant's future loss of earning capacity because of the delayed effects of the injury;[8] and the deputy commissioner could not take judicial notice of employment opportunities in the area when assessing the loss of earning capacity rating, but must rely on evidence in the record).[9] But in most cases, compensation was greater than it would have been if it had been based strictly on physical impairment. The reason is that most cases were handled by lawyers who tried to circumvent the agency and the courts by concluding compromise and release settlements (known as "washouts" in Florida). In practice, the rule of thumb, according to plaintiffs' lawyers interviewed during our field work under the pre-1979 law, was that the percentage rating for loss of wage-earning capacity was about double the physical impairment rating.

At the time of our field work, there was widespread unhappiness in Florida with the high incidence of washouts, and a sense that workers with serious injuries were being undercompensated and those with minor injuries overcompensated. Legislation enacted in July 1978 provided that the number of weeks of benefits to be multiplied by the percentage of disability was to increase with the severity of the injury according to a new formula: a rating of 1 to 10 percent was multiplied by 175 weeks; a rating of 11 to 50 percent, by 350 weeks; and a rating of 50 to 99 percent, by 525 weeks. This provision very likely did have the effect of redirecting benefits away from minor injuries and toward major injuries, but the approach still relied on the evaluation of physical impairment and diminution of earning capacity. That is, it remained an *ex ante* approach to benefits. Moreover, because of poor draftsmanship, the amendment produced anomalies: a worker with a 10 percent rating received 17.5 weeks of benefits, while a worker with an 11 percent rating received benefits for 38.5 weeks.

Procedure for Permanent Partial Disability Benefits

Before the 1979 reform legislation, the administrative posture in Florida was essentially one of allowing the employee to pursue his own

interest. In practice, this usually meant retaining an attorney and filing a claim. Almost all permanent partial disabilities other than those delineated by the schedule involved the filing of a claim.

Florida had not issued any manual or other guide to assist the parties in evaluating cases. Each case that was contested depended on an individual determination based upon the presentation of the respective attorneys, as well as, sometimes, the respective bargaining power of the parties. Most cases involving permanent partial benefits were litigated, and a high percentage ended up in compromise and release settlements. One insurance claims examiner stated he did not offer to pay anything voluntarily in cases where a physician's evaluation of 5 percent permanent partial disability was made. His rationale was that if he agreed to 5 percent, the attorney would file a claim for 15 percent and the judge would compromise on 10 percent. On the other hand, if he offered nothing, the compromise figure might be 5 percent of permanent partial plus an attorney's fee. The probability of litigation was so high in these cases that carriers found it to their advantage to procrastinate and compromise only after litigation was well advanced. Carriers who paid some amount on the basis of physical impairment recognized that a higher rating would result when loss of wage-earning capacity was assessed.

The absence of an active workers' compensation agency and the vagueness of the criteria for evaluating nonscheduled cases resulted in considerable litigation. The number of awards issued by the judges of industrial claims increased from 14,076 in 1970 to 20,153 in 1974 to 25,381 in 1978. The time involved in processing a case from claim filing to judge's decision increased from 170 days in 1970 to 201 days in 1974. Most orders issued by judges were washouts. Of the 25,381 orders issued in 1978, 17,058 (or 67 percent) were in this category. This compares with 9,237 washouts out of 14,076 orders in 1970.[10]

Attorneys' fees were an important part of this litigious system. In 1972, for 9,720 awards by judges, the total attorneys' fees awarded were $8 million. In 1978, attorneys' fees were awarded in 15,883 cases and totaled $19.7 million.[11] Before amendments effective July 1, 1978, these fees were paid entirely by the employer or carrier and did not come out of the employee's portion of the award.[12]

Experience with Permanent Disability Benefits through 1978

Costs for major permanent partial disability cases were high. The average cost per case was only moderate (see table 3.11), but the number of such cases as a proportion of all cases paying cash benefits more than tripled between 1958 and 1978, when the numerical share was 131 percent of the national average (table 3.7). In terms of the share of dollars expended on cash benefits, major permanent partial disability benefits in Florida were 23 percent above the national average share by 1978 (table 3.15). The effect of the resulting high total cost for major permanent partial cases was to dominate the below-average costs (as a percentage of all cash benefits) of permanent total and minor permanent partial cases, so that the cost of all Florida permanent disability cases as a percentage of all cash benefits was 106 percent of the national average in 1978.

The economic pressures that led to the 1979 reforms in Florida involved more than the increasing frequency and total costs of permanent disability benefits as a share of all cash benefits. Not only had the permanent disability slice of the pie grown, but the entire pastry had swollen. One reason was the substantial increase in benefit levels during the 1970s. The maximum weekly benefit for total and partial disability was $56 as late as 1972 (46 percent of the state's average weekly wage), but then the maximums increased annually through 1978, at which time the maximum weekly benefit was $126, or 74 percent of the state's average weekly wage.[13] Total expenditures on workers' compensation in Florida, including cash benefits and medical expenses, went from $75 million in 1970 to $257 million in 1978.[14] The higher cost was due in part to the increased number of workers covered by the Florida workers' compensation program, but even the cost per employee increased rapidly during the 1970s. One figure that illustrates the high cost of the workers' compensation program as of 1978 is the average insurance premium for workers' compensation paid by a representative sample of employers. Florida employers were expending 2.641 percent of payroll on workers' compensation insurance in 1978, a figure well above the 28-jurisdiction average of 1.420 percent (table 3.18). Indeed, among 47 states with comparable data for 1978, Florida's percentage was exceeded only by the District of Columbia and Oregon (Hunt, Krueger, and Burton 1985).

The objective evidence thus indicates that Florida was facing a real problem with workers' compensation costs as of 1978, and that the problem was partly associated with the increasing numbers and costs of permanent partial disability cases. Particularly suspect were the nonscheduled permanent partial disability cases. As previously discussed, a choice of criteria could be used to determine benefits in these cases, which generally resulted in the duration being determined on the basis of the ill-defined diminution of earning capacity. The nonscheduled permanent partial disability provision was generating litigation and widespread reliance on washouts to resolve cases. The problems of administration were confounded by a relatively passive workers' compensation agency, which did little to assist workers or to reduce litigation by anticipating and solving problems. The system was perceived not only as expensive, litigious, and poorly administered, but as arbitrary in its treatment of workers—especially those with permanent partial disabilities for which the benefits awarded seemed to depend as much on the location in the state, the lawyer, and the judge of industrial claims as on the merits of the case.

By 1978, pressures for reform, or at least drastic change, were building in Florida. Some changes were made that year, such as a new formula for translating percentage ratings in nonscheduled permanent partial disability cases into weeks of benefits. But the critical enactment in 1978 was a sunset provision, declaring that the workers' compensation law would expire in 1979. This sunset provision was a strategic ploy designed to force a major overhaul of the workers' compensation program in 1979.

The Florida Wage-Loss Approach to Permanent Partial Disability Benefits

The wage-loss approach to permanent partial disability benefits adopted in Florida in 1979 has been described as a "bold experiment" that "has attracted national attention."[15] The factors that led to the enactment of the law, the features of the 1979 legislation and subsequent amendments, and the cases interpreting the law are provided in this section.[16]

The Economics and Politics of Change

The story of the forces and maneuvering that culminated in the enactment of the 1979 legislation is much too complex to recount in this chapter. Fortunately, there is an excellent study of the reform process, *The Circle Solution*, written by Jim Mintner, which was sponsored by the Florida Association of Insurance Agents and published in 1982.[17] Although not devoid of hyperbole and although clearly sympathetic to the wage-loss approach, the book is surprisingly frank and accurate, at least about those matters with which we are personally familiar.

As outlined in the previous section, workers' compensation costs had rapidly increased in Florida, to the point that its system was the third most expensive in the country. Moreover, the criteria for nonscheduled permanent partial disability benefits were ambiguous, the state workers' compensation agency was passive, and litigation and reliance on washouts to resolve cases were increasing. Other factors that made Florida a likely target for reform were the prominence of the state—large and rapidly growing—and the political environment. Unlike some other jurisdictions in which high cost had emerged as a problem, such as Michigan, the District of Columbia, and Oregon, Florida had a relatively conservative legislature. One reason was the low proportion of workers who were union members—the 11.7 percent of the nonagricultural labor force organized in 1978 ranked Florida 46th among the 50 jurisdictions in this respect (Gifford 1982, p. 68). Thus workers' compensation in Florida was an inviting target for reform efforts: pernicious, prominent, and pliable.

Although some reform of permanent partial disability in Florida was almost inevitable, the adoption of the wage-loss approach was not. That element in the reform picture was, to a large degree, a legacy of the National Commission on State Workmen's Compensation Laws. Although it did not explicitly endorse the wage-loss approach and made no pretense of having invented it, the National Commission in its *Report* (1972, p. 69) suggested that

> Consideration should be given to the use of two types of benefits:
>
> *permanent partial impairment benefits*, paid to a worker solely because of a work-related impairment